Mothercraft

Sarah Comstock

Class RJ61

Book .C74

Copyright No.

COPYRIGHT DEPOSIT.

MOTHERCRAFT

The ideal band is knitted and fastened with tapes.

MOTHERCRAFT

By

SARAH COMSTOCK

ILLUSTRATED

NEW YORK
HEARST'S INTERNATIONAL LIBRARY CO.

RJ 61
.C14

Copyright, 1915, by
HEARST'S INTERNATIONAL LIBRARY CO., INC.

All rights reserved, including that of translation into the foreign languages, including the Scandinavian

APR 29 1915
©CLA397803

This Book is Dedicated to

Dr. THOMAS DENISON WOOD

of Columbia University, who, through many years as physician, teacher, and friend, has made me so ardent a worshiper at the shrine of Good Health, that I welcome the opportunity of even this small volume to preach the gospel. I wish it could in any measure express to him my gratitude.

CONTENTS

CHAPTER		PAGE
I	Motherhood Tomorrow . . .	1
II	The Days Before the Stork .	26
III	Hygiene in the Baby's Wardrobe	47
IV	Feathering the Nursery Nest	75
V	Feeding the New Baby . . .	102
VI	The Growing Body of Your Child	126
VII	A Footing For Life	156
VIII	The Growing Mind of Your Growing Child	184

ILLUSTRATIONS

The ideal band is knitted and fastened with tapes . . . . . *Frontispiece*

FACING PAGE

A plain slip, the sleeves having open wrists—
A cross-barred dimity dress with raglan sleeves—
A plain kimono slip, easily made, easily washed and easily put on—
A crepon nightgown fastened with tapes and snaps—
A petticoat which fastens only at the shoulders . . 52

Mummy-like wrappings are no longer a fetish, and "drafts" hold no terror 64

Cleansing a bottle with the bottle-brush. The small pan and pure white soap have been used in the first cleansing: the large pan will be used for boiling the bottles 118

Filling a bottle, which will be stoppered and placed in the ice-box. The milk has been strained into the pitcher. The complete outfit for preparing artificial food for the baby, and for the caring for the bottles, nipples, etc. 124

Baby's bath should be stimulating, if taken in the morning; soothing, if taken at night . . . 138

Two of the habits which make for lateral curvature—persistently sitting on one foot and persistently lying on one side 170

Blocks foster the building-instinct and develop the constructive faculty. They should be of substantial, durable material. This set is made of hard wood and comes in a strong chest 200

JUST A WORD

The aim of these chapters, which first appeared in *Good Housekeeping Magazine,* is to put into non-technical English some of the newest teachings expressed by some of the safest-and-sanest specialists of today; in other words, modestly to act as interpreter.

The material upon which they are based has been sifted from the teachings and preachings of physicians, teachers, nurses, and other specialists who, in different cities of our country, rank among the highest authorities. I have avoided extremists; I have sought those who lead along the direct and happy path of common sense. This means that they hold to a rational conservatism while they fear no new doctrine which test proves sound. They are moderns, but never faddists.

Those who have assisted me, through lectures, through correspondence, and above all through personal advice, are so numerous that I am reserving the list of names for another page. I am inexpressibly indebted to every one of them.

S. C.

New York,
February, 1915.

ACKNOWLEDGMENT

In preparing these chapters I have had the assistance, advice, and inspiration of many specialists, among them the following. With some I have had talks, long or short; I have listened to the lectures of others; some have reviewed the manuscript with me. Two or three may not even know that they have helped me, for I have had no opportunity to thank them personally for their lectures which I have attended. To all of them I gratefully acknowledge my indebtedness.

Dr. Thomas Denison Wood, Columbia University.
Dr. Josephine Hemenway Kenyon, Lecturer in Teachers College.
Dr. S. Josephine Baker, New York Department of Health.
Dr. Ira S. Wile, New York. Pediatrician.
Dr. Charles G. Kerley, New York. Pediatrician.
Dr. C. G. Grulee, Chicago. Pediatrician.
Dr. Caroline Hedger, Chicago.
Dr. Evangeline W. Young, Boston. Lecturer on Eugenics.
Dr. Eugene Crockett. Harvard Medical School.
Dr. Edward S. Peck, Consulting Oculist of City Hospital, New York.
Dr. Walter Clayton, New York. Dentist.
Dr. Percy W. Roberts, New York. Orthopedist.
Dr. Henry Ling Taylor, New York. Orthopedist.
Dr. A. B. Judson, New York. Orthopedist.
Dr. Eliza M. Mosher, American Posture League.
Miss Jessie H. Bancroft, Pres. American Posture League.
Miss Mary L. Read, Director of the School of Mothercraft, New York.
Miss Minnie H. Ahrens, R. N. Supt. Infant Welfare Society, Chicago.
Mr. E. E. Rittenhouse, Pres. Life Extension Institute, New York.

Mr. George R. Bedinger, Director Milk and Baby Hygiene Association, Boston.
Mrs. Frederick Cleveland Test, Director School of Mothercraft, Chicago.
Miss M. L. Daniels, R. N. Supt. New York Diet Kitchen Association.
Miss Virginia Crutchfield, Member of Nurses' Staff, New York Diet Kitchen Association.
Miss Lillian Drew, Instructor in Physical Education, Teachers College.
Mrs. Margaret J. Stannard, Director Garland School of Homemaking, Boston.
Miss Margaret E. Sayward, A.B., Instructor in Literature for Children, Garland School of Homemaking.
Miss Sophie Butler, Kindergartner, Garland School of Homemaking.
Miss Grace L. Brown, Instructor in Kindergarten Education, Teachers College.
Mrs. S. B. Maltby, Branch Librarian, Tompkins Square Branch Public Library, New York.
Mrs. Bernard Mole, Principal St. Mary's Nursery College, London.

"DON'TS!"
by the Baby

Don't ruff me and fluff me, shirr, rosette, and puff me. I'm not an exhibition of fancy-work. I'm a human being, who wants to be comfortable.

Don't pin me down so closely in the bed, or bind my little growing body with such tight clothing, or pinch my enterprising feet with such badly shaped shoes, that I feel like a nut in the grip of a steel nut-cracker. Don't you know that stretching and toe-curling are two of the finest athletic sports known to babyhood?

Don't clap at me and boo at me, cackle, bleat, and moo at me, when I'm trying my best to store up enough energy by peaceful slumber to become the President of the United States.

Don't hurt the feelings of dear Aunt Mary Jane when she presents us with a heavy, cold, piqué crib-spread and a knitted infant veil. Thank her warmly and tenderly for me—they can be made into a shirt-waist and a shoe-shine cloth.

Don't swathe me and bundle me, coddle, trot and trundle me, till I long to be a little savage with a nice, neglectful, barbaric mother. Dress me lightly, lay me down in a quiet place, and leave me alone.

CHAPTER I

MOTHERHOOD TOMORROW

TO begin with, let us take the case of a certain young wife whom we will call Alice Andrews. For months she sewed, until the dainty garments billowed up about her—sheer, lacy, beribboned. Gifts poured in from friends—fluffy afghans and tiny sacques and fine wee dresses, hand-embroidered. Thousands of careful stitches went into the preparation—months of loving, ceaseless labor. For the greater part of a year she toiled, often while suffering, but she never wearied, for all the toil, all the misery, were for a Purpose—the biggest Purpose in the world.

Then the climax came, and she laid aside her needle as a man lays aside pen or plane or plow to go to war. Gallantly, head up,

the flags of her soul flying, she went forth to one of the greatest battles known to womankind. For hours she fought, and called it "worth it." It was all for the great Purpose.

The Purpose was, outwardly, small and red and squally, but, inwardly, it held potentially the presidency of the United States. I happened in one day, and asked Alice how she was going to care for this tremendous responsibility.

"Oh, instinct will teach me," she replied, easily. "That's what mother says—rely on instinct."

There was a nurse; but one day she left, and thereafter Alice tried to prepare the milk as she had half-observed the nurse doing. She added malt-sugar and water, but she never thought of sterilizing the bottles; she thought washing them was enough. The upshot was that the Purpose, the potential President, gave a few pitiful cries one day, and died.

All those months of toil at the needle, of physical wretchedness, of passionate hopes —all that agony of battle—to end in a few chests and drawers filled with futile little garments and stored out of sight! This was because Alice Andrews relied upon instinct. In other words, she was the amateur mother of yesterday instead of the professional mother of tomorrow.

"Instinct tells a mother what to do." Oh, it's an old chant, and it's as scientific as the classic statement that an upstanding fork means a caller, or that the moon is made of green cheese. Instinct forsooth! If Alice Andrews' husband were employing a stenographer, would he trust instinct to teach her to take his letters in shorthand? If Alice were sending children to school, would she expect instinct, operating through their teacher, to reveal to them the truths of long division and cube root? When she herself lay ill, was it instinct that showed her twenty-five-dollar-a-week nurse how to

carry her through the crisis? By no means; Alice Andrews knows that in the office, the school, the sick-room, the most expert advice is demanded; and yet she claimed that she could carry a human being through the most critical period of its life by instinct. While tuners are specially trained before they tune a piano, milliners before they wire a bow, and waiters before they poise a platter, the greatest profession in the world, that of motherhood, is carried on by an army of untrained workers.

Four hundred thousand children under five die in one year in the United States. Of that number it is roughly estimated that two hundred thousand, that is, one-half, die of preventable diseases.

Who might have prevented them?

Often, to be sure, the municipality. It may have played the fool with typhoid germs, permitting them to gambol merrily through the milk or the water of the city. It may have received mosquitoes as familiar

guests. It may have spent large funds upon thieving contractors, and then turned thrifty, saying smugly, "We have just erected a very imposing bandstand in our public park, and we really can't afford to build an isolation hospital for contagious diseases, just at present."

Accidental infection may be to blame sometimes, or poverty, or a stupid nurse, or a careless doctor. But there is one cause more blamable and more alarming than all these others—often concealed behind these others—and that is the fact that a large majority of our mothers do not know the ABC of scientific motherhood.

The mothers of thousands of these babies who die are those who might have prevented the deaths. The mother who *knows* demands proper sanitary conditions in her town. The mother who *knows* can often avoid poverty, or get around it, even to making her own ice-chest. The mother who *knows* is less likely to let accidents happen.

The mother who *knows* does not employ a stupid nurse or a careless doctor, and within certain limits she can replace or carry on their work. And I am not talking only of mothers among the so-called ignorant classes, either.

We may treat a symptom here and a symptom there—swat the fly in one community, look into the social standing of our cows in another—but we are ignoring the root of the matter until we educate our mothers. The oldest, newest, biggest profession for women is Mothercraft.

Mothercraft—don't you like the word?

In Europe there are now a good many schools devoted to this science, but in America it is a new-born profession as yet—so young that it ought to be taken up and trotted and fed and helped to grow by every woman in the United States. When the American Association for Study and Prevention of Infant Mortality met in 1911 (it is a great, national Association, and has

been addressed by many of the greatest scientists our country has produced), a resolution was passed to work for the establishment of "continuation schools of homemaking" all over our country. The schools proposed were to instruct the well-to-do as well as the poor; the women of marrying years as well as those already married.

"Federal statistics show," it was stated in the resolution, "that there are in the United States 4,990,977 women between the ages of fifteen and twenty-four, neither students nor breadwinners, and eligible for these schools as well as for marriage."

It is a fairly large class to begin with, that almost-five-million; and the fact that schools of motherhood are urged for them by an association whose sole business is to study why babies die and how they can be kept from dying, is pretty good evidence that ignorant motherhood has a large amount to do with present conditions.

In New York City Miss Mary L. Read has a small school with a large ambition; she is blazing a trail. This is solely a school of Mothercraft. Courses in housekeeping are included, but the principal studies are the home care and training of children, and the students sought are those who hope one day to become mothers themselves.

Here and there, all over the country, we find the movement stirring. In Chicago, for instance, a woman's club is giving similar lessons in scattered centers. In many domestic-science schools we find a course of instruction in some mothercraft subject.

Consider these facts, selected at random from all sorts of reports which pertain to vital statistics and infant mortality:

Somewhere in the world a baby under one year is dying every ten seconds, or one hundred and eighty of them while you were at breakfast this morning.

Our infant-mortality rate is estimated as

about the twentieth best in a list of thirty-one civilized countries, though in national wealth we lead the list. That simply means that we are too busy making money to take time to halt the procession of little white hearses.

It is almost as true today as it was when Bergeron said it, that a baby who comes into the world has less chance to live a week than has an old man of ninety. Somehow, that doesn't look as if nature intended such infant mortality, does it?

Again, as mentioned above, two hundred thousand children under five die each year, in the United States, of preventable diseases.

These statistics—don't you hear them? They cry out. They are like little tortured, terrified voices. Statistics—dull, lifeless, meaningless? Not these. They are as dramatic as the most vivid tragedy that ever was staged. But the most appalling of all is that estimate of the deaths *preventable.*

It means that in just one year of our history we hang on our doors 200,000 little white-crêpe signals too many, follow 200,000 little white hearses too many, dig 200,000 short graves too many. Why?

Here is the reason for one of those deaths: Mrs. Shapiro gave her child of four a wilted tomato "to stop him cryin'."

Another: Mrs. O'Flaherty was "afraid o' drafts." Consequently she kept her baby indoors—wrapped up like a mummy of ancient Egypt—in a tenement which opened only on a foul court; and a pneumonia germ observed, "Just what I'm looking for."

But these cases, someone comments, are among the poor and ignorant. Such things can't happen in the "residence section."

Can't they, indeed? Mrs. Knox had been a professor in a woman's college before she married, and she had commanded a master's salary for her unparalleled knowledge of mushrooms. But all she did know was

mushrooms—not babies. She refused to nurse hers, even when artificial feeding disagreed with it. It died.

Mrs. Whitman had been a jolly, wholesome girl, supposed to be well educated in a private school, with some European travel, and a fair training in music and art. But she didn't know enough to stop her violent one-stepping before the baby came, and every afternoon she was at a dance. A corsétière aided and abetted her. The baby never drew breath.

Such preventable infant mortality, therefore, can happen also among the prosperous and ignorant. As a matter of fact, some claim that the prosperous today are more ignorant of mothercraft than the poor. Dr. Abraham Jacobi, that veteran pediatrician, arose recently before a large dinner audience and made the statement that the mothers of our poor are being given a better training than the mothers of our rich. "Our poor rich!" he said. "It is time

they should have an opportunity to learn!"

Many organizations in our great cities are at work, preaching the gospel of better babies to the mothers in the tenements. Here a private society takes up the work, there a Board of Health. Visiting nurses raid a home, show an open-mouthed family how to modify milk, and plump the baby, willy-nilly, into a tub. Lectures in baby hygiene are given where milk is dispensed. Not one-thousandth part as much of this work is done as we need, and yet, when you compare the hundreds and hundreds of mothers reached by this mother-training with the little groups who hear some mothercraft lecture in the Garland School of Homemaking in Boston, for instance, or the Homemakers School in Menomonie, Wisconsin, or Miss Read's school in New York, you feel that, as Dr. Jacobi says, the so-called upper classes should be given a chance. Mrs. Shapiro received a visiting nurse before the next baby came, and

learned the laws pertaining to wilted tomatoes. Mrs. O'Flaherty's daughter of twelve joined a Little Mothers' League, and came home to teach her mother that a baby is not a mummy. But Mrs. Whitman would never have let a nurse, sent by the city, teach her the need of care during pregnancy; neither would Mrs. Knox have visited a public diet-kitchen and learned the vital need of nursing her baby.

Consequently they remain just *amateur* mothers.

Nowadays, among the prosperous classes, we often find over-care of babies instead of under-care. The one is as unprofessional as the other. Dr. Charles G. Kerley, a pediatrician whose patients are among the wealthy of New York, tells mothers that he wishes every baby were twins, so that there would be some wholesome neglect of one, at least, while the other was being coddled. The mania that causes a child's hands to be antiseptically washed every few

minutes, that watches the thermometer in panic lest it deviate a hair's-breadth, that permits no caresses of any kind, is as unscientific as neglect. A thorough professional training will cure mothers of fads—a little perverted knowledge being a very dangerous thing on which to rear babies.

Look at that word "preventable." Don't take it too literally; it doesn't mean that in every given case death could have been averted, but that the disease causing each death was of the class known as "preventable"—that is, we ought to know better than to permit such diseases to flourish. Now, understanding this qualified meaning, not only do half the babies die needlessly —say between forty and fifty per cent., to please the conservative—but there are several times as many preventable non-fatal sicknesses as deaths. Thus the total of preventable sickness, both fatal and not fatal, becomes enormous.

Statistics express themselves in extreme

terms. They pay more attention to death than to the illnesses which escape it. But one specialist says, "Serious illness is just as important as death." Some of us may feel that it is more important. Perhaps, if a baby had its choice, it would rather be weeded out by Nature in the beginning than left to drag through a miserable life, one of the unfit. This same specialist preaches every day that serious nutritional and nervous ailments acquired during the first year are never totally overcome. The first is the most important year of life; that year may create a lifelong suffering from nerves or stomach trouble. Scrupulous attention to the nutrition of the child during this time, and the avoidance of all nervous disturbance in his little life, may mean the permanent prevention of such invalidism.

You know the mother who says, "Oh, I'm glad to have Johnny have whooping-cough and measles as early as possible"; as if they were inevitable, like falling in

love. Some day we'll talk differently. It is believed by many leading physicians that the day is coming when contagious diseases, exclusive of falling in love, will be stamped out.

The mother who borrowed from a neighbor's child a woolly lamb on wheels for her little Edith to play with, and, not mentioning the fact that little Edith had diphtheria (the neighbor's child not having had it), returned the lamb in "perfectly good condition," is not hastening that day. The trained mother will understand prevention of contagion so well that she will obey its laws to spare others' children.

Typhoid and malaria are classified as preventable. You say your city permitted the epidemic. Haven't you, as mothers, the right to look to your city's housekeeping? Many of you, the country over, have done this, and the more thorough a mother's training the more awake will she be to danger. Here, too, comes in the value of

resistance; it is through knowledge of child-hygiene that a mother builds this resistance—by daily care of the child.

Select at random a recent year—say 1909. There were 22,990 babies under one year old who, that year, died of respiratory diseases in the registration area of the United States. Respiratory diseases include influenza, pneumonia, and the like. Mrs. O'Flaherty's baby was a case; in fact, pneumonia took 17,549 of that total. Dr. S. W. Newmayer, of Philadelphia, says that these diseases can be greatly prevented by dressing the child according to the variations of heat and humidity, and by attention to the need of fresh air and general sanitary conditions.

There you have it! Educate the mother.

Here we have the most astounding number of all: 41,161 summoned by diarrheal and enteric diseases and diseases of the digestive tract in general. Mrs. Shapiro's wilted tomato was no more to blame than

was the indigestible feeding of the mushroom professor's baby. It is said that diarrhea and enteritis are almost wholly preventable, and ventilation is counted almost as important in the prevention of diarrheal diseases as in that of pulmonary diseases.

Summed up, however, improper feeding is the primary cause of death among babies, and tomorrow's mother will be mistress of the laws of infant feeding; moreover, she will be trained to recognize warnings in time to call a doctor.

What of the little army, 33,274 strong in 1909, who never faced the fight, or saw but a few short days or months of life? Premature birth, congenital debility, and diseases of early infancy slew them at the outset.

Now motherhood begins long before the first cry of the new-born baby. The least we can do is to train the mothers of today and tomorrow. When the world knows the full meaning of the social evil, and

when our women know the immense importance of self-care before childbirth, and recognize their responsibility in that direction, there will be another tale to tell.

Mr. E. E. Rittenhouse, president of the Life Extension Institute, says that we wake up to our responsibility "after the baby's too sick or too dead to have it matter." There is little use in abusing the birthrate until we have done more to curtail the deathrate. And these deaths, it should be remembered, are only the extreme cases. Don't forget that there are far more preventable sicknesses than deaths. It is not only live babies we want: we want healthy babies—and not only healthy babies, but happy and good babies.

Now see what this training in mothercraft, already pioneering its way, will mean to the mother of tomorrow. First of all, the very fact that such a training is expected of a girl will give her a keener sense of responsibility toward the little life in-

trusted to her. Then, that sense of responsibility aroused, she will be called upon to use all the brain she possesses to grasp the science of mothercraft. Nobody questions the presence of abundant gray matter in the modern woman; she has proved it in higher education, where she has stood side by side with her brother. She has wedged her way into practically all the professions; as lawyer, physician, educator, she is to be reckoned with. But somehow she has not, in the past, thought it worth while to apply much of this gray matter to the profession of motherhood; it looked too simple, seemed too near home to be regarded very seriously. If you had asked her to apply her much-revered gray matter to the choice of a baby's go-cart she would have scoffed indignantly. But explain to her that a go-cart with its seat incorrectly placed may concern the future of a child's spine, that a go-cart with the seat brought too low, into the midst of dust and mi-

crobes, may mean serious sickness to an infant: and she will cease to scoff.

Wherever classes in this science of mothercraft are being started women are awaking to how much they don't know.

A course, to be complete, begins with the period of pregnancy. The carelessness and ignorance of mothers of all classes during this period is alarming. Upon a woman's care of her own mental and physical welfare two lives are dependent. Dr. Cressy L. Wilbur has emphasized the fact that in studying infant mortality we must always take into account prenatal as well as postnatal causes. We must nourish and guard the prospective mother so that the child shall not be prematurely born, or succumb during the first weeks of life. Congenital weakness, he says, causes many a death from infectious and other diseases later on.

Then come lessons on the birth of the child: preparations for it, and the full meaning of the experience. Don't you

know the kind of mother who says, "Time enough for my daughter to learn all this when she comes to it!" and snaps her prim lips like a purse-clasp? We are through with that kind of propriety, which has cost health—often lives. If for no other reason, let a girl know what she has to face because, as in all of Nature's miracles, understanding it robs it of its worst causes of dread.

The care of the new baby follows. The mother of the future will know how to feed, dress, bathe it. She will recognize the warnings of sickness. She will be able to meet emergencies before the doctor arrives. The very cries are studied—the cry of pain, of hunger, of temper.

Then comes the care of a child over two, over five, and so on. The development of the diet is fundamental. Stewed apricots are excellent for a child of five years, although not so for one of five months. And don't accuse me of exaggeration, please. I

know the woman who did not know this, and she could raise Pomeranians without an error.

The next step—the school age—embraces questions of habits, such as a bad standing position, and holding a book too near the eyes. There are the problems of hygienic dressing, of recreation, work, sleep—all the matters that contribute to the health of boy and girl. Children's cooking, laundry, sewing, and the home care of sick children are studied. No matter how much assistance a mother hires, she must *know how,* herself, in order to supervise others' work.

Nor does a thorough school of mothercraft stop at the physical care of the child; a mother is always the first and most important educator. What are a teacher's three or five hours against all the rest which belong to the mother? Unless she knows many of the things that a trained kindergartner knows—how to direct the

child's work at home, how to help with games, how to tell stories, how to encourage nature-study—she will be losing one of the greatest joys that life can bring her, namely, a full companionship with her child. Of course the average intelligent mother does more or less of this sort of thing today; but she does it as an amateur. The child's mind is in her hands: she can scatter seeds hit-or-miss, dig and water them as it happens; or she can become a skilled gardener, sowing the seeds and training the plants in that little mind to grow and unfold in the best soil and under the best conditions for development. But she must learn, first.

Such lessons must be practically demonstrated, with good, naughty, wholesome, troublesome, lovable youngsters to prove the truths taught. Side by side with this practical work, however, goes a certain amount of more abstract lecturing—on such subjects as the history and psychology

of the family, certain phases of biology and eugenics.

As a matter of course no school of mothercraft would be complete without such training as any domestic-science school gives—in subjects such as family cooking, marketing, house-furnishing, analysis of fabrics, and so on. But it is the study of the care of the child which advances this new training beyond the domestic-science school.

The tendency is to bring learning, like charity, nearer home. When woman first seized upon education, she eagerly demanded knowledge of the tongue of ancient Greece and the fauna of South Africa.

Then she realized the remoteness of Greek verbs and South African beasts. She sought an advanced training in the keeping of her own house.

Now at last she has demanded expert training in motherhood, the most intimate phase of her whole life.

CHAPTER II

THE DAYS BEFORE THE STORK

OUT in the middle of a big, blizzard-swept, sun-scorched prairie, in the forsaken part of our country, where you're lucky if the whole horizon shows you even one curl of smoke to utter the word, "Home"—there is a weather-beaten post standing up solitary beside a road. To this post is nailed a box.

Days go by, sometimes weeks, and the lid of that box is never lifted. But on a certain morning in 1914 the old R. F. D. postman clattered out that way in his ramshackle buggy and deposited in the box a large envelope.

Two hours later a young woman galloped up on a cow-pony, across the face of Nowhere, eagerly lifted the lid, and more

eagerly tore open the expected envelope. A modest pamphlet bound in gray paper was revealed; on the cover she read:

U. S. Department of Labor
Children's Bureau
Julia C. Lathrop, Chief,

and below, the simple title,

PRENATAL CARE

On the road back to this young woman's little brown shack on the big brown prairie the cow-pony jogged at his own sweet will, for in the course of the five miles she was reading, devouring, the thirty-seven printed pages of that Government bulletin. All the way from Washington Uncle Sam had sent it at her request; it came bearing a message which opened her eyes as they had never been opened before.

"Charlie," she said when her husband came home, "I wish you'd mend the buggy as soon as possible." She was pleasant

about it; but Charlie caught a note of unusual resolve. He looked up quickly.

"Thought you liked the saddle." Charlie always finds tomorrow a convenient day.

"So I do," she replied, "but I'm going to give it up till after the baby comes. The book says it isn't safe for me just now."

He opened his eyes. "What book?"

She showed him the pamphlet. And at what she said next he opened his eyes still wider.

"If the United States Government thinks enough of every baby in the land to send this book to every baby's mother that it can find, even out here in this lost place in the desert, urging her to protect that little life by caring for her own—then it's the least that every mother can do to follow its rules to the letter." Then she added: "This baby isn't going the way the other did." And neither of them said anything more just then.

But when the Stork arrived at that shack it brought the lustiest young Westerner that the doctor had ever driven across the prairie to welcome.

The Children's Bureau at Washington is sending these instructions to every woman who wants them, because it believes that the care of a child begins before it is born. Thus does Miss Julia C. Lathrop state her reasons:

"The latest reports of the Bureau of the Census on mortality statistics show that slightly more than forty-two per cent. of the infants dying under one year of age in the registration area in 1911 did not live to complete the first month of life, and that of this forty-two per cent. almost seven-tenths died as a result of conditions existing before they were born or of injury and accident at birth. Of those that lived less than one week about eighty-three per cent. died of such causes, and of the number that lived less than one day ninety-four per cent.

died of these causes. Thus the Children's Bureau was drawn inevitably to begin its contemplated series of monographs on the care of children by a statement regarding prenatal care for mother and child."

* * * * * *

The first questions that every mother-to-be asks are usually these:

How shall I dress?

How shall I regulate my diet?

How shall I bathe?

How shall I exercise?

If to these she would add,

How shall I think?

she would have fairly covered the fundamentals of self-care during pregnancy—and self-care means care of the child as well.

The modern ideas concerning dress at this period illustrate markedly the trend toward normal living. In old days physicians advised a woman to lay aside the corset and everything in the least like a corset;

they insisted that she wear the most atrocious-appearing garments, garments so clumsy in style, and so utterly different from all other garb, that the victim of them shrank from appearing in public. Today the most up-to-date physicians are permitting the corset or corset-waist, and are approving the skillfully designed dress which permits ample freedom, and at the same time follows the general lines of current fashions.

But when any physician indorses the corset, he means *the right corset.*

A badly-fitted or over-tight corset is not only torment to the wearer, but it is absolutely perilous to both mother and child. We assume to start out with that you are the sensible young woman who never wears such an abomination anyway: that you have always been in the habit of leaving the laces sensibly loose and not restricting any part of your figure beyond the limit of comfort. Such a corset, then, you may

safely wear through the first two or three months. If you have not been in the habit of wearing any, of course you will not adopt one now.

By the beginning of the third or fourth month you should have a special corset made. Do not economize on this. It should be accurately fitted by someone who knows how, and the better the material, the longer it will last. It should come down to a deep line in front, arching forward to conform to the figure, and fitting fairly closely about the hips; and it should have plenty of extra lacing space and elastics in the sides. It must fit the bust loosely, at the same time supporting it. If this corset is correctly made, you will not need to discard it until a short time before the arrival of the baby, when an abdominal supporter may replace it.

As for other clothing, it should be loose and comfortable, but there are patterns for pretty dresses which are all of this. Ready-

made garments can also be bought in excellent styles. The underclothing must be thoroughly warm; in winter, it should have high neck and long sleeves. The stockings should be fastened by side elastics, and in fact all the clothing should, as far as possible, be supported from the shoulders. Avoid anything which binds about the waist.

Shoes are of great importance. High heels are risky, for they always open the way to a fall, which is serious at such a time. Moreover, they tilt the body forward in a disadvantageous position. Wear low-heeled shoes, and make sure that the nerves are not irritated by any pressure on the feet—the shoes should be looser than usual.

The diet of the mother-to-be has always been associated with absurd superstitions, old-wives' tales, and terrors. As a matter of fact, the most sensible physicians of the day are preaching, "Eat what you want."

This advice is to be followed, however, after you have thoroughly investigated your wants, and made sure that they are both safe and sane. It does not mean that you are to indulge morbid cravings for unusual foods—anchovy paste, champagne, and sour February strawberries are some of the abnormal desires I have heard of, desires of women who had never enjoyed any of these things in their lives before. It does mean that you are to keep to the safe path of a simple, nourishing diet, eat enough, and know when to stop eating.

Meat should be used sparingly during this time—once a day is sufficient, and if eggs and milk are substituted part of the time for meat, you will be as well off. Vegetables and fruits should always form an important part of your diet, but more especially now, when the system must be kept in perfect order. Salads are good, provided the dressing does not disagree with you, but there is danger of this. Cer-

tain vegetables are hard to digest—the authority, Dr. Slemons, names among these cabbage, cauliflower, cucumbers, egg-plant, and radishes. Onions prove indigestible to some. But this leaves a long list of vegetables which are most beneficial, including beans, peas, spinach, asparagus, celery, lettuce, and tomatoes.

For dessert, avoid rich cakes and pies. Fruit may be substituted, or one of the light puddings, such as blanc-mange, custard, gelatine, and tapioca. Pure ice cream is harmless, and if made of good milk or cream is nourishing as well. Avoid a great many sweets, such as candy and cake. This does not mean that they are to be renounced altogether, for the system needs some sugar, but they may cause an excessive weight on the part of the child if over-indulged in. The best authorities do not recommend strenuous dieting to reduce the child's weight, for this is more likely to have the result of reducing the strength of the

mother; it is best, however, to eat sparingly of the sweets.

Whole wheat or corn bread are better than white. Milk should be an important item of the mother's diet, both before and after the birth of the child.

And now as to the quantity of food. Between the anxious physician of yesterday who insisted upon a greatly-reduced diet, and the head-wagging old women of the day before yesterday, who croaked their familiar chant of "Eat for two, eat for two!" we have a rational path today—the path of eat-as-much-as-you-want. During the first part of pregnancy the appetite is likely to be weak; don't force it. Later on, the appetite grows vigorous; satisfy it. But the safe side is always under-, rather than over-eating; while you must have enough nourishment to keep up your strength at all times, you must be particularly careful never to more than satisfy a wholesome appetite, for indigestion may have serious re-

sults. Divide the food of the twenty-four hours into five or six light meals rather than three hearty ones, if you have any signs of indigestion; this will have a tendency also to control the frequent nausea.

It is especially necessary at this time that you drink a great deal. Water is the best beverage of all. After water come sweet milk, soup, cocoa, and buttermilk. Three quarts of fluid should be drunk every day—or more. Tea and coffee need not be given up entirely, if you have been accustomed to their use, but use them sparingly. Alcoholic drinks should never, under any circumstances, be used at this time unless recommended by a physician. We do not as yet fully comprehend the workings of alcohol in the mother's system during pregnancy, but physicians are pretty well agreed that it may be very far-reaching in its effects. It is not giving the baby a fair chance, at any rate.

Bathing is of the utmost importance, for

the reason that if the pores become even ever so little clogged they cannot throw off the waste, and it is more important now than at any other time in your life that *all waste of the system should be properly carried off*. The morning bath may be cold if you have made a habit of this previously; otherwise, moderate the temperature and let it be only cool. Give up your customary cold bath if you do not glow after it. In any case, rub vigorously with a rough towel to stimulate the circulation.

At least one warm bath a week should be taken—at night. Two or three should be taken if they cause no discomfort. Very lengthy and very hot baths are too exhausting. Avoid hot baths at those particular times when great care is necessary in all ways.

Exercise—indoors, outdoors, regularly, and lightly. Easy housework is one of the best forms of exercise, for it gives activity to many muscles. Don't do a washing, lift

heavy furniture, climb ladders, or run a sewing machine. If coal is to be carried upstairs, some other member of the family can do it better than you. But cooking, dishwashing, very light ironing, and the like are safe, and they serve to occupy the mind as well as invigorate the body.

But no indoor exercise is worth a continental compared with that taken outdoors. Walk in the open air, always remembering to stop on the instant that you feel tired. Some women feel tired at a half-mile, others at a half-dozen; less than the half-dozen, however, is a safe maximum for even the most athletic. Do very light work among your flowers—those geraniums need to have their dead leaves snipped off, and the rose vines should be tied up. No—not above your head—let someone else do all the high reaching. And take your exercise like your food—in small doses.

There are important don'ts in the matter

of exercise. Don't ride horseback, play golf or tennis, or bathe in the surf. They are too violent—they involve risk. Jolting in an automobile is also dangerous, though a smooth drive over easy roads, and not a long one, may be beneficial, in either carriage or machine.

When you can't exercise, just exist in the open air, as many hours as you can out of the twenty-four. Take your knitting or your reading to the porch. Receive your callers there. And keep your house, especially your sleeping-room, ventilated thoroughly. Use light-weight, warm bedding, and sleep with open windows—not wide open, of course, in the most bitterly cold climates, but with as much fresh air as you can comfortably bear.

"How shall I think?" is a question that ought to confront every woman who is placed in immediate charge of a new life-to-be. Her own health is so greatly affected by right or wrong thinking, that she can-

not afford to neglect the matter for even a day.

She must think hopefully.

That means, avoid fear, expect a successful outcome of your months of loving labor, care, sometimes suffering. Say to yourself, "I am conscientiously following every wise rule of health, and the normal result will be a healthy child, and my own safe delivery."

She must think calmly.

Every form of excitement is a disadvantage, often causing insomnia and nervousness, which disturb the digestion and otherwise injure the health.

Light and interesting occupations keep the mind from brooding, worrying thoughts. Mingle with your friends, as long as it does not fatigue you, chat of pleasant subjects, shut worry away in the darkest cellar of your brain, and lock the door on the ogre. If you find a tendency developing to lie awake after you go to bed, thinking gloomy

thoughts, try a hot-water bag at your feet or a cup of hot milk to quiet the nerves.

Now for some of the special difficulties which arise to confront a mother at this period. Trouble with the teeth is one of the annoying enemies.

As soon as you know that you have entered upon pregnancy, let a dentist examine and make all fillings necessary. This will prevent an ordeal later on, when you are less able to endure the nerve strain of dentistry.

The tendency to indigestion, and all minor irregularities should be corrected by diet as far as possible, never by medicine if it can be avoided. If you must use medicine, let your physician advise you.

Rubbing a little vaseline into the breasts every day tends to prevent trouble with them.

The best protection against kidney disorder lies in drinking plenty of fluid. But since there is often a disorder which the

patient cannot detect, she should insist that her physician examine into this matter at least once a month at the beginning of pregnancy, and even more often later on.

The annoying nausea which accompanies this condition is relieved by eating a cracker or two before rising in the morning; by a glass of milk between meals, or frequent light meals; and by a calm mental attitude. The last-named is very important, for nervousness communicates itself promptly to the stomach—witness the host of "nervous dyspeptics" in proof of this!

Nervousness may be at the bottom of many of your physical ailments. You must quiet your nerves at this time by abundant sleep. Many doctors lay down the rule that every pregnant woman should sleep at least one-third of the twenty-four hours. There should be a nap in the middle of the day.

When you first see the signs of the approaching Stork, choose and engage your

doctor—and remember that the choice is very important. You may not need him greatly until the day of miracle arrives, but you should have his interest in your case, and you should call upon him if any puzzling symptoms display themselves. He will suggest certain specific rules for your case—no two are exactly alike. For instance, if for any reason you cannot go outdoors, he will recommend a few light exercises to be taken indoors, using the leg and abdominal muscles. If you are obliged to stay in bed, he will advise that you let a masseuse give you treatment. So there are many individual problems arising, and the wise physician will help you to solve these.

But to the woman who passes through a normal pregnancy, the above rules of health answer her chief questions. Summed up, you will notice that they amount to very much the same as any rules of health for any normal person. Only that, if you have been ever so little slack before in mat-

ters of hygiene, you must redouble your efforts now that so great a responsibility rests with you.

Just a word on the subject commonly known as "prenatal influence." Old-wives' tales again! Thank medical science, which has put a devastating bomb under the hideous superstitions relating to this subject, and satisfactorily exploded the theories for all time! Dreadful tales of "markings" have terrified mothers for years and years of history; the mother of today knows better. The highest authorities no longer believe that these dreadful resemblances to some creature which has frightened the mother can be stamped upon the unborn child.

But take "prenatal influence" in another sense, and it is far from being unreal. The influence of your general health, physical and mental, upon your child-to-be cannot be overestimated. Mrs. Max West says:

"If she (the mother) lives in such a manner as to establish and conserve her own health, taking plenty of sleep and exercise, eating sensibly of simple food, and in every way striving to take the best possible care of her own body, so that the digestive, assimilative, and excretory functions are carried on in the highest degree of efficiency, she can be quite sure that the child will be able thereby to build up for himself a sound and normal body and brain."

CHAPTER III

HYGIENE IN THE BABY'S WARDROBE

THE Oracle stood in the midst of a group of girls and women who were gathered in an uptown dwelling-house of New York City. It was plain that she was an oracle from the rapt manner in which the group hearkened to the words of wisdom falling from her lips. She didn't look it, being small and blonde and gentle instead of black and sinuous and mysterious; but presently her gentleness vanished, and she spoke with something akin to violence.

"This," she said, "is one of the wickedest things in the world. It may undermine human happiness. If there is one thing on

earth that is all sentiment and no sense, it is this!"

And she held aloft a tiny affair of blue kid and shiny buttons—merely a baby's shoe!

It may not appear at first glance that a baby's blue kid shoe is an affair of vast importance. But, as a matter of fact, it is a subject of scientific criticism in one of the most important courses in one of the most important schools in the United States. This is Miss Mary L. Read's School of Mothercraft, and it is important, not because it has great size or great fame, but because it is blazing a remarkable trail which is bound to be followed by many others in the days to come. When the history of education in our country comes to be written, Miss Read and her school will be recorded as pioneers. She declares that the mother of yesterday was an amateur, that the mother of tomorrow must be a professional; but she faces the fact that the

mother of today is still holding off dubiously from this point of view, just as the old-time farmer held off when science came along and told him how to save his crop by blanketing the moisture—"none o' them highfalutin' new idees fur me," you know.

With the old methods the crops died. So did the babies.

And while disapproval and doubt still lurk in the air, Miss Read has had the courage to found a school for the sole purpose of teaching mothers their profession. It occupies an entire building, a residence, in New York, and it employs as lecturers only skilled specialists in pediatrics, in child-study, in domestic science. The most popular course is called "The Nursery"; in it Miss Read treats of those months during which the mother-to-be prepares the empire for His Small Majesty; her care of herself, the arrangement of the room where the baby is to spend his first days, and the preparation of the layette.

The incorrectly made shoe, pinching and creasing the poor little growing foot, serves as text for a thorough and scientific study of the baby's wardrobe. From shoes to cap, every article should be chosen with the common sense that is innate and the knowledge of hygiene that is acquired. Health, even life, may depend on proper clothing.

The one fundamental law, preaches this school, is, "Make the baby comfortable."

And this, be it understood, is not accomplished by garbing him like an elaborate boudoir pincushion. The other day I paused before a window in New York's most fashionable shopping district; it was filled with fabulously priced garments for infancy. They fluffed and they ruffed; they burst into bloom, here, there, everywhere, with pink rosettes; they fussed and they mussed—or they *would* muss, within five minutes, if a thoroughly athletic, do-or-die, all-for-progress, fight-for-my-country type of young American, a few months of

age, should enter those garments under compulsion. If he could speak, he would beg aloud: "I beseech you, Very Large Person, who descends upon me and twirls my arms about in their sockets and forces them into ruffled and bow-knotted sleeves, please rip off all those dreadful, meaningless, unbeautiful, fussy trimmings, and let me wear the simplest of garments. And kindly remove all these hot wrappings, one upon another. I am not an onion, but the warmest-blooded human being in existence. Dress me with simplicity and lightness, so that I may be comfortable, and I shall reign as happy as the proverbial king."

So much for generalities. Now glance over the details of the model wardrobe given in this "Nursery" course. The standpoint is that of hygiene, not fashion, remember. But all the new patents and patterns for baby-wear are investigated by the specialists in charge, and, when a valuable improvement is brought out, it is given

consideration. It is interesting to observe that the instructors here cling pretty closely to standard garments, and let most of the bizarre inventions pass them by.

Suppose you are preparing a wardrobe for the first three months, which is sufficiently far in advance for the start. Babies differ so in the rate at which they outgrow and outwear garments that it will be time enough to meet their further needs later on. First, the students are advised to prepare six or eight simple slips. They had best be of nainsook, crêpe, dimity, or long-cloth. The standard length of twenty-seven inches from shoulder to hem is followed. It may be remarked here that in giving the number needed of each garment, the school aims to give a fair supply for the mother of average means. It is highly probable, however, that you will make and receive enough to garb an entire orphan asylum.

Next comes the flannel petticoat. Four

A plain slip, the sleeves having open wrists.

A cross-barred dimity dress with raglan sleeves.

A plain kimono slip, easily made, easily washed and easily put on—A crepon nightgown fastened with tapes and snaps—Above, a petticoat which fastens only at the shoulders.

petticoats will be a fair supply. The Gertrude pattern is recommended. This is not gathered to a waist, but cut on the lines of a princess dress. It should fasten with two snaps on each shoulder. Just here, modernism steps in to utter a protest against those time-honored atrocities, the pinning-blanket and the barrow-coat. Banish them!

Beneath the slip and the petticoat lies a great problem—it might verily be called a national problem—namely, the baby's shirt. Held in the hand, this seems an exceedingly small article to occasion disagreement among patterns, parents, and pediatricians, almost to the point of warfare. Yet, "Wool, all wool, the warmest weave possible!" cries one, shuddering at the mere suggestion of slaughtering influenzas and pneumonias. "The lightest linen mesh, absolutely essential, a material to discourage perspiration," asserts another. Silk, cotton, mixtures, all have their

champions. Wool points with alarm at Mesh, crying, "Anarchist!" while Mesh rejoins by jeering, "Fossil!"

After all, there's some reason for the fray. No factor in a baby's life comes closer to him than his shirt; no friend is more intimate; and if it's a friend in which confidence is misplaced, woe to the poor baby!

This school attempts to sift and summarize the teachings of the most eminent and advanced pediatricians when it recommends a three-quarters wool shirt for the first few weeks, whatever the season, with the thinnest of gauze garments underneath; later, a cotton mesh in summer and a silk-and-wool in winter. Remember this enlightening fact: a mesh is always warmer than a closely woven material, because air is a non-conductor of the heat of the body, and the open weaving admits air. You see the point? The body heat is kept in by the non-conducting air that enters the meshes.

You know, by experience, how much warmer your own sweater is than the heaviest cloaking; or the afghan your blessed grandmother knit, than a quilt. For this reason, select loose weavings for the baby. A closely woven shirt often misses its purpose, and chills by its clamminess rather than warms.

Four of the first shirts is a minimum number to start with.

The provision of diapers is a matter of the utmost importance, not only for the baby's immediate comfort, but for his health, as well. Start with not less than eighteen. Authorities differ as to the best material for them. Cheese-cloth is advocated by some, on account of its remarkable absorbent qualities, united with its softness and lightness. Cotton flannel is used by many, but should be used with this warning: always boil it when new, to render it absorbent. The bird's-eye diaper, twenty by twenty inches, with a bit of old linen—

table-damask is excellent—folded in, to give it a soft surface, is the one chosen by Miss Read, if you prefer the home-made article. But, best of all, she urges, is the knitted and shaped garment, very absorbent, very light, very easily kept in place.

Whatever diaper you use, two points must be borne in mind: the surface must be soft, for chafing may become serious; and the folding must not be thick enough to throw out the hips. The tiny bones are soft, as yet, and they easily take on whatever shape they are forced into. There is danger, too, in pinning the diaper too tightly about the hips; impeded circulation may result from this practice.

Miss Read also speaks emphatically on the subject of the fitted rubber garment so widely sold. All of you know the heating property of rubber; you have experienced it in your raincoat, your overshoes. What must it be when worn close to the little body? It is considered absolutely un-

healthful, more dangerous than you perhaps imagine. There is a knitted waterproof diaper which may be folded lightly over the usual one for emergency use—when the baby is to be taken out for a long time, for instance. But all hot and uncomfortable bundlings should be carefully avoided in ordinary use, no matter how great a convenience they may appear at first thought.

A word in passing on the subject of chafing. It is a frequent annoyance, and may easily grow from a mere annoyance to a more serious difficulty. The first and simplest rule is that of prevention by perfect cleanliness. But there are times when the delicate skin becomes irritated in spite of this. The trouble can usually be checked by the use of a boric solution which any druggist can furnish; it should be applied by allowing it to drip gently from a piece of absorbent cotton which has been dipped in it. If the chafing still continues, vase-

line may be applied; and, in the worst cases, a powder, stearate of zinc, is effective. The latter is recommended by Dr. Josephine Baker, of the New York Department of Health, and may, incidentally, serve in case of an ugly burn.

If buttons and tapes could replace the safety-pin, the millennium would be in sight. There is a paper pattern now on the market, describing what looks to be an excellent substitute for the square diaper, with tapes for tying in place of the wicked though time-honored pin. Only when many babies shall confer, to compare their experiences, can we know whether this new garment is all that it claims to be. But this we do know; it will be a joyful day for infancy when the so-called safety-pin is no more. Not only does it persist in jabbing, even under skillful management, but it has a habit of gravitating toward a baby's throat, as a needle toward a magnet. When the baby swallows it, by the way,

there is but one thing for the layman to do, and that is, hold the baby up by his legs, and force him to cough out the swallowed pin by vigorous thumps on his back and shoulders. This appears brutally primitive, but it is in accordance with the advice of physicians, who warn the unskilled against trying to remove any object from the throat with untrained fingers, which may only succeed in pushing it farther down.

We are now down to the difficult subject of the band—difficult because it is a point whereon doctors disagree; and this School of Mothercraft prefers not to decide. The students are advised to follow each her own physician's counsel in the matter. For the most part, the profession agrees nowadays that from one to two months is long enough for the use of the first band, but some still think it should be used for a longer period, believing that it wards off both colds and intestinal troubles. It should be knitted,

and fastened with tapes. The time of wearing it is a detail pertaining less to mothercraft than to doctorcraft, and is left for the latter to settle. No mothercraft school should cause dissension with any reliable physician, but should aid his patient in supplementing and carrying on his work intelligently. The professional mother of the advanced type stands to the physician in a relation akin to that of the nurse: not asserting personal opinions opposed to his more extensive knowledge, but trained so thoroughly that she can work in harmony with him.

If the band which replaces the shirt is to be worn, a well-shaped one can be bought, with shoulder-straps. The diaper tabs are pinned down. The garment is elastic and gives the baby all the leeway necessary for his gymnastic performances.

The other day, in looking over the layettes displayed in one of the largest New York shops, I came upon the most irresist-

ible garment that ever gladdened my eyes. It was a tiny kimono of the peachiest pink Japanese silk, sprayed over with delicate white blossoms in Japanese embroidery. In shape it did not differ at all from the kimono you wear every morning when dressing your hair. But it was far more than pretty. It was an ideal garment for the very small baby on a warm day. The silk possessed just enough warmth to ward off colds on the day when a knitted or flannel sacque is too heavy; it was washable; and, furthermore, it possessed the kimono sleeve.

That kimono sleeve! It is incorporated into the very creed of Miss Read's School. It is urged for every garment where it can possibly be used. No other one problem of dressing the baby causes as many sighs and groans as the question of getting that squirming, waving, wriggling, flapping, twisting, defiant little arm into the hole aimed at.

Shape the wrapper, then, and the long flannel coat, and the flannel and crocheted sacques, with this sleeve. And in providing these outer garments—by "outer," I mean those garments to be worn over the cotton slip, either when you take the baby up indoors or when you take him out—bear in mind the watchword "lightness." Bundling is one of the commonest curses of babyhood. Choose a light-weight flannel or a challis, and never use a heavy yarn or zephyr for your knitting and crocheting.

The first cloak will be an ample cape—of warm flannel for winter, of light cashmere, lined with Japanese silk, for milder weather. From this sleeveless garment the baby soon graduates into the free-arm class, and excellent use will he make of his privileges.

The cap, too, should not be too warm. The customary bit of embroidered cotton goods and lace, the ribbon fastened with snaps instead of a bow, is a quite sufficient

crown for the royal head in summer; the coldest days call for nothing heavier than an angora knitted cap, or a light serge or broadcloth lined with washable silk. As for the veil, it is becoming obsolete, and the only misfortune is that it has not quite become so. I remember a "Shetland veil," relic of my own infancy, in which I used to wrap my dolls, and I know now that never was an infant veil put to better use. It is nothing but a burden to the much abused baby. It obstructs the vision, with a real risk of harming the eyesight; it hinders complete freedom in breathing; it gathers moisture, and, in cold weather, freezes against the lips and nostrils; it is, in general, a bugbear. If the day is so bitterly cold that the baby cannot go out without his face being covered, it is a perfectly good day to keep him at home.

The gospel of the modern pediatrician is the gospel of fresh air. I know a baby of today whose first word was neither

"Mama" nor "Papa," but "F'esh air." She would wake in the night crying for it. Since we have come to this, since we demand open windows and sleeping-porches where our grandmothers' hair arose in horror at a slight "chilliness," we must adapt our layette to our modern ways.

The baby lies very still for a while after his advent into this world, silently forming his opinion of it, but undertaking no enterprises. He has found the thin cotton slip with simple undergarments sufficient for both day and night, with two changes in twenty-four hours. But when his feet have grown active, and you are beginning to turn off the heat for the night, to throw open the windows, perhaps to place the crib on the sleeping-porch, you must alter the clothing to meet this change. The nightgown which closes with buttons at the hem, the back folding over the front, is recommended as a protection to the feet; this offers more freedom than the pattern

Mummy-like wrappings are no longer a fetish, and "drafts" hold no terror.

which gathers on a drawstring at the hem, and is therefore preferable. It should be made of flannel for sleeping in the cold air.

The gown may be followed by night-drawers, the "Teddy Bears" which cover the feet like stockings. Best of all, for really cold weather, is the sleeping-bag, to be made of flannel. A paper pattern for this, with hood attached, can be bought, or a literal bag may be made, drawn up on a string around the neck. Shut the baby into this cozy little cavern of warmth, pin the bedclothes—loosely, remember!—so that he can't fling them off in the violence of his young energy, and there you have him, proof against the dangers of the weather, while his greedy lungs are drinking in all its benefits.

In providing any sleeping-garment which closes at the foot, beware of making it too short. Stretching is a baby's form of gymnastic drill; it does for him what swinging from the rings or hanging from the bar

does for you. Don't let anything interfere with his gymnastics. And, too, he may be much handicapped by tight pinning down of his covers. Have you yourself never waked in the terror of some horrible nightmare, to find that you were so tightly tucked in that your whole body felt as if it were in a vise? The normal human being likes to stir a bit, and freely, in his sleep; and there is nothing more important to remember than the fact that the baby is a normal human being. Except for his being at a more sensitive period of life, he is much like yourself in his likes and dislikes, and his general hygiene should correspond. Allowances must be made for his being more frail than the adult, more susceptible to disease; but the fundamental principles of his care are exactly like those of your own. Therefore, it's not a bad thing to ask yourself, now and then, how you would feel under his conditions.

If he is sleeping in very cold air, you will

find a sweater and mittens convenient, after he arrives at the age when arms refuse to "stay put" under the bedclothes. Such garments as these need not be provided, of course, until after the ruler of the nursery empire has come to his throne. The first shirts, bands, diapers, petticoats, slips, sacques, wrappers, and cape are enough to start with. As the weeks go by you can increase the number of garments, but never deviate from the rule of simplicity which should govern their design. The later slips will probably be about the same length as the first, but larger, to allow for the rate at which his weight is increasing. The numbers of wrappers and sacques must be augmented, for the baby will be taken up more and more indoors, besides being kept for longer periods outdoors. If he arrives in the summer, physicians say that he may fare forth into the open world before he is a month old; if in winter, he may perchance be housebound

for the first six weeks of his existence, but seldom longer. From the trial trip of half an hour, his jaunts grow to five hours within a period of about three weeks, by which time he is a hardened man of the world. Bearing all this in mind, you can see what provision for outdoor sleeping and waking hours will be needed in the wardrobe as the weeks advance.

Among some of the small accessories, items which have much to do with daily comfort, there is a knitted bib which absorbs moisture more thoroughly than the quilted style. The quilted bib is hard to wash thoroughly. If you prefer to make your own, use crash for the purpose, and, if necessary, put a layer of thin, waterproof material under the crash. A bib which holds moisture is not only untidy but risky to health, lying as it does on the little chest. The thinner bib is far more cleanly and sanitary than the quilted one. A half-dozen is a minimum number.

The best pinning-band is woven of an elastic, loose-meshed material. If you make your own, get a soft flannel and leave it with raw edges, for any crease, such as a hem makes, is irritating to the tender flesh. Four of these bands will be sufficient.

Under all the sane innovations in baby attire is the rule that there shall be as few gathers, buttons, bows, and so on as possible; every one of these presses the soft flesh. Hence, it is well to use snaps in the place of buttons. Never allow baby clothes to be starched. Use the tape that is warranted not to twist. All these things make for His Majesty's comfort.

There is a growing tendency, and a wise one, to replace the older fabrics with soft crêpon or French crêpe for the little slips and dresses. They need not be ironed, and they are most comfortable. The fine cross-barred dimity, too, is dainty, and wears excellently.

To return to the text of the blue kid shoe. The principal of the School of Mothercraft has been goaded to despair by the sight of growing little feet pinched and pressed and distorted. She has longed to snatch off countless pairs of treasured first shoes, and stow them in the waste-basket. "The proper place for most baby shoes is the relic chest," she says, "where parents can wax as sentimental as they like over the atoms of blue kid, but where they are safely out of the poor baby's way."

Thus speaks authority. And here follow the very important instructions for dressing the feet of infancy, as laid down by the specialist in baby care.

First, don't dress them at all.

This law holds good for all those early weeks when the long garments, as well as the bedclothes or carriage blankets, cover these wiggling, curling, growing members. Let them wiggle, let them curl, let them

grow! Don't persecute them with hot, knitted bootees, which are totally unnecessary under so many coverings. There may be rare occasions when excessive cold makes them and the stockings excusable; but such occasions are rare, indeed. Even if the youngster has a tendency to cold feet, you had much better warm his bed with a hot-water bottle and let the small toes go bare; or, better than the bottle, warm his feet with a brisk rubbing.

One blazing June day I remember visiting a diet kitchen in New York, one of the public stations where the poor may bring their infants for professional advice. An earnest young Italian mother came in, carrying her offspring, gorgeous in all the ribbon and cheap-lace finery that the mother could muster for the occasion. But apparently the offspring was most indifferent to the splendor of its appearance, for it howled in the most agonized manner, and without ceasing.

"She ver' bad—ver' bad," grieved the mother, evidently much alarmed.

The nurse looked over the case. Then, "Take off those hot bootees," was her verdict.

The mother was horrified. They were vividly pink, and they had tassels. This was cruelty.

"Take off those bootees," repeated the nurse, and she repeated it twice more. In the end they came off—and the howls ceased!

That baby had been crying at the top of its lungs for over an hour, according to the mother's statement, and, as it proved, for no sickness or pain whatever, but because its poor little feet were bundled on a June day—to satisfy the mother's vanity! This is a simple but pertinent lesson in mothercraft, and it does not apply alone to the "ignorant classes," either.

And when the days of the shoes come, beware! Look at what you are buying with

the utmost care. The feet, in the formative period of infancy, are easily pressed out of shape for a lifetime, to say nothing of being subjected to misery at the moment.

Look to see whether the shoe is too narrow across the toe, pinching, and causing the toes to overlap.

Look to see whether it is too low, that is, lacking space for the height of the foot so that the nails are driven in, becoming ingrowing.

Look to see whether there are seams that will crease the tender flesh. There should be no seams whatever inside the shoes.

Look to see whether the soles are of paper which will wear out quickly, and rub up into tormenting ridges.

In the end you may find a little kid shoe with none of these defects, and you may purchase it with an easy mind. But you will be still wiser if you pass by even the best of the conventional type, and buy a

pair of wee Indian moccasins instead. They are the ideal shoe for the baby to start out with; and after all, they are very appropriate, for you dare not pretend that your offspring isn't a young barbarian, bless him! He wouldn't be the normal sort of baby if he were not. He has all the path of civilization to tread in the development of his individual soul. Did you ever hear that wonderful phrase in which modern science utters the whole philosophy of human life, "The history of the individual is the history of the race"?

CHAPTER IV

FEATHERING THE NURSERY NEST

SUPPOSE you are an advanced young woman of today.

That's no reason why there shouldn't be a small dream tucked away deep down in your heart, is it? You being very "advanced" the dream may become embarrassed and sneak off when brought to light. But it's there, all the same.

You are alert, practical, independent. You belong to the class called "middle," in which our highest values, physical, intellectual, and moral, abide. Your father is not rich, and a generation ago it would have been assumed that you would be "married off" after he had provided comfortably for your childhood and youth. At your maturity the burden of your support would

have normally shifted from his shoulders to those of a younger man.

But this is another generation. The young man is slower in coming forward these days, and you cease waiting. You are between twenty-one and twenty-four years old, and you live in one of our larger cities; therefore, according to our government statistics, there are forty-four others of you in every hundred who become bread-winners. You may prepare to be a nurse, a secretary, a designer, a lawyer. But all the time, in hiding but persistent, there is the dream.

Now suppose, just for instance, you have decided to be a teacher, and for that purpose have plunged into biology, or mathematics, or literature, at Teachers College, which is a part of Columbia University, in New York City. You are smothered in an atmosphere of learning; but, quite by accident, you happen in at Room 414 in the School of Practical Arts, and there come

upon the most unexpected sight. It is a class of girls before whom stands a small woman, her face full of the little upcurves that dwell in the faces of those who love gardens and birds and children.

"The two things that a baby needs most of all," she is saying, "are fresh air and—more than fresh air—*mothering.*"

What's all this? That shy, stubborn little dream in the modern girl's heart suddenly gives a great flap of its ridiculous fledgling wings. Here, in the midst of these corridors of sterner sciences, a class of girls is being taught how to mother babies! And in spite of your advancement, and because of the mutinous flap of that undying little dream's wings, you register for the course.

Ah, but there is no warfare between the modernism and the dream! The young woman of today may spend years in education; she may even add to these more years of wage-earning; but time spent thus need mean nothing more alarming than mother-

hood deferred. Instead of being alarming, in fact, it is the best thing that ever happened to motherhood. Not only does the new ideal of motherhood demand a broader, deeper training along general lines; but it demands a highly specialized training along its own lines.

By the back door, as it were, an actual mother-training course, and a wonderful one, has crept into one of our biggest and most formidable universities. When the great institution of Teachers College established, under Dr. Josephine Hemenway Kenyon, a course called "The Physical Care of Infants and Small Children," and put in charge of it later one of the foremost infant-welfare promoters of our country—namely, Dr. S. Josephine Baker,* of the New York Department of Health—it designed the course for the training of visiting, school, and welfare nurses. But I chal-

* Since this chapter was written, Dr. Josephine Hemenway Kenyon has resumed charge of her course.

lenge any student to prove that she never once dreams of using her knowledge in a smaller, dearer empire than that of the public institution; and I pray that there be not one who can deny such a charge!

The instructor pictures that empire, summons a vision of it, and keeps it before you all the time that you are listening to these remarkable lectures, crammed full of weight-charts and teething, breast-feeding, and baths. Step by step she is leading her students to see the Ideal Nursery.

First, before you furnish, you are led to see the room itself. You are to choose the happiest room in the house—one that is sun-flooded and air-swept. Best of all exposures is the south, and if to that another exposure can be added, so much the better. If you live in the city this may seem a difficult ideal to realize, but any trouble you may take to secure such an arrangement will be repaid you by the baby a thousand times over, in good health, good temper, and growth.

You are taught that two primary laws should govern the equipment of the nursery.

One is the law of simplicity.

The other is the law of cleanliness.

The second depends upon the first.

It is absolutely imperative that you should be able to take out and clean readily everything in the room. Therefore your furnishings must be simple. Ornate furniture, hosts of bric-à-brac and pictures, heavy draperies, may be of great use to the junkman; but in the nursery their especial use is to gather dust, and microbes never feel more at home than in a cozy little heap of dust. It's a question of furnishing to suit the microbe or the baby.

Simplicity demands only such furniture as is necessary. The nursery is no place for luxury in its usual form, which seems generally to be in the shape of heavy, plushy hangings and thick carpets. Let your luxury be that created by sunshine

and good taste. Your floor should be of hard wood, or covered with linoleum; you may have pretty rugs, provided they be washable; the rag rugs used for cottages are good. And your own, or the nurse's, single bed, the baby's crib, the low, rockerless chair where you sit to bathe him, the armless rocking-chair where you occasionally (never regularly) rock him, another chair or two, the chiffonier, where the robes of royalty are kept, the little washstand or toilet-table, the rack for airing his clothes —every one of these, though absolutely simple, may be pretty. White-painted wood is excellent for most of these pieces; the bed and crib may be of white enamel or brass or willow. Add to the above-mentioned objects a hospital screen of white linen panels mounted on a white wooden frame, and you have an outfit that is complete, simple, charming, and above all, washable.

No sanely human scientist could ever urge that your nursery should look like the

operating-room in a hospital. The instructor tells you that a few pictures may relieve the bareness of the walls; only, she begs, let them be few, that they may be easily taken down and dusted. You may carry out a color scheme of your own choice; and your curtains may just as well be pretty as ugly. In short, let your personality creep into the arrangement of the room.

There are very important psychological reasons why the child should find himself in an environment of subtle taste and beauty at the period of first impressions. The *consciousness* of what it sees comes to a baby before its first half-year has elapsed, and from that time onward the pictures upon which its physical eye has been resting make a more and more keen impression upon the brain, growing so vivid, as childhood advances, that they remain mentally visual throughout life. All of us can recollect distinct pictures of the surroundings

of our childhood, while later environments rapidly grow dim.

Therefore, choose carefully for your baby the environment that is to create his first impression of the world in which he is to live. It may be as beautiful as you desire so long as you never deviate from that vital law of Simplicity.

By way of simplicity you achieve cleanliness. There are other factors in cleanliness, though; sun and fresh air are better cleansers than any mop. Here are other points to lay aside for the future:

The perfect nursery is built without corners, being rounded in all places where a corner would naturally be. This is for exactly the same reason that sanitary milk-pans and babies' bottles are rounded; namely, because germs, like the traditional pussy, want a corner. The walls and floor of the room can be kept absolutely clean if rounded. But, realizing that you may have to make the best of what you have, you will

naturally reflect that millions of babies have lived to a ripe old age in spite of right-angled nurseries, and you will merely redouble your efforts to banish the germs.

The walls of the room should be painted during the days of infancy. There is no reason for depriving the little folks of delightful wall-papers later on—they always take a keen pleasure in the warmth of a figured and daintily tinted paper; but during the extremely susceptible weeks when the child is first facing the world, excessive cleanliness is his safeguard, and the advantage of the painted wall is that it can be washed. Hard paint should coat the woodwork, for it, too, must come in for a scrubbing. In fact, the law of cleanliness demands that everything in the nursery should, as far as possible, be washable.

There are two elements in his physical surroundings to which the baby is especially sensitive, and these are *sound* and *light*. The arrangement of the nursery

should take this fact into consideration. For the first day or two of life the infant is deaf, owing to a stoppage caused by mucus; after this, the hearing is abnormally acute. Therefore, the nursery should be at the quietest end of the house. A young baby hears so keenly and sleeps so lightly that very slight noises rouse him, and he may pay throughout a lifetime for nervous disturbances in infancy. The teacher of this class asserts that the first year is the most important period of life; that serious nervous ailments during that time are *almost never totally overcome.* For this reason, she pleads for quiet on the baby's behalf, for peaceful sleep, uninterrupted by either accidental noises or—horror of horrors!—that worse than senseless custom of waking and startling a baby by facetious clappings and booings. The neurotic adult can trace his wretchedness in thousands of cases to an unquiet babyhood.

The ideal nursery should be kept in semi-

darkness until the weakness of the very young eyes passes. Dark green or dark tan window shades should soften the light; it is advisable, however, to have two sets of shades, light and dark. There should be no window draperies except a simple muslin curtain, fastened to the sash so that it can be raised with the window, thus affording freedom for the passage of air.

Also for the sake of the eyes, extremely light or glaring tints on the walls should be avoided. Tan is an excellent color, both for artistic and hygienic reasons.

The heating of the nursery, you are taught, is a matter of the utmost importance. As the heating arrangements of any house are installed with difficulty and expense, you will probably have to accept for the nursery whatever kind of warmth is already there—steam passing through coils, hot air entering through registers, possibly a base-burner stove. Any one of these can be made satisfactory, provided it is in good

order, but this point is essential; a sensitive baby must not be subjected to the caprices of a furnace which draws well one day, and at a change of the weather-cock on the next flirts with bronchitis by not drawing at all. Let the heat be abundant and regular; then regulate it to the exact temperature your nursery requires, which is about 66 to 68 degrees by day, and 60 degrees by night. The latter part of this rule obtains, however, for only the first four months or thereabouts. After that, the cold sleeping-room is to be introduced gradually. You begin, if the weather is cold, by using the simple window-board, which affords a slight crack between the two sashes and gives a ventilation superior to that of any artificial system, according to a specialist.

The extremes of virtue and viciousness in heating are to be found in the open fire and the gas-stove. No warmth is as near perfection as that radiating from the fireplace

which possesses a good draft; and none as pernicious as that created by the burning gas. The latter devours the oxygen, leaving only exhausted air for the baby.

Now for the details of the nursery furnishings. First and foremost the crib stands forth, being the only piece of furniture that interests His Majesty during his first weeks. He must be allowed to sleep in peace, and he must sleep alone.

Over and over again the lecturer who is conducting this course urges upon her students the fact that the first requisite in the care of a baby is *mothering.* It gives you new hope to hear her; it makes you feel that, after all, Science is not the grim old party he is supposed to be. She tells you that *one-half of the babies in foundling asylums die within the first year.*

Isn't that a sad and a wonderful fact?

They are treated with all the knowledge that science has to offer; still they die. They are not mothered.

And because mothering is the foundation of her creed, she pleads that a baby be taken into its mother's bed now and then, for the sake of both. She protests against the science that would rob the world of every human impulse. But for all this, she urges the right of every baby to its own bed for sleeping purposes. The visiting nurse in the tenement, even, insists upon this; she shows Mrs. Shapiro and Mrs. O'Flaherty how to fit up a soap-box or a bureau drawer. Never, except on brief visits, is the baby to lie in its mother's bed. It must sleep in the perfect quiet of solitude.

The bed should be washable, and should be equipped with a hair mattress, a rubber pad, a small hair pillow, cotton sheets, and blankets of three-quarters wool. The metal crib should have high, sliding sides and narrow spaces between the bars.

Of next importance is the toilet-table, or its substitute. The shops display all sorts of sane and insane types; some of the

former include a fitted-in washbowl and pitchers, the latter are adorned with irritating and germ-harboring gewgaws. Nothing is better than a white table which can be easily moved and cleaned; near it, a corner shelf is convenient for the reserve supply of toilet requisites.

During the "Nursery" course you find yourself thoroughly drilled in every item of the baby's toilet equipment, its use, and the reasons for its use, from the physician's standpoint. First, you are warned always to choose the purest soap, preferably the best quality of Castile, for the infant's skin is unduly sensitive. A bottle containing the boric-acid solution must be at hand. This is used to allay slight inflammations —for instance, of the eyes. Beside it should be a roll of absorbent cotton. In case of irritation of the eyes, the cotton is to be dipped into the solution, which is dripped, by gentle squeezing, into the eye, the child being held in such a position that

the water will run toward the outer corner and thus avoid the risk of carrying infection to the other eye. A glass should be kept for the solution, so that you may never have to dip into the bottle directly. All dregs left in the glass and every bit of used cotton should be thrown away.

A bundle of wooden toothpicks should be at hand. A bit of the aseptic cotton wrapped on the end of a toothpick is used to cleanse the nostrils—not the ears. Random poking about in a poor baby's ears is a medieval torture. If it is necessary to cleanse the mouth, wrap some cotton about your little finger, dip it in plain water, and wash the gums with exceeding gentleness; but this should be done only when particles of the food adhere. There is a pronounced reaction nowadays among pediatricians against the frequent washing of the mouth which was so strongly advocated some years ago. The danger of infection is too great. In naming several causes of totally unneces-

sary deaths among infants, Dr. Abraham Jacobi has included "the improper rinsing of the mouth."

The talcum powder—unperfumed—must be at hand, to prevent chafing in the creases of the plump little body; and a supply of vaseline and stearate of zinc should be kept in case the chafing should become serious and more serious. Liquid vaseline may occasionally be used in the nostrils in case of a catarrhal cold, and listerine is a valuable first aid to the injured who may have met disaster in the malicious scratch of a safety-pin. And because we have not yet learned to dispense with that friendly foe, an ample supply of these pins should help equip the toilet-table.

The soft little brush—hardly less soft than the ridiculous hair it caresses—may be accompanied by a tiny comb, which will be needed in case the hair is thick enough to tangle.

And as for the bath—that most thrilling

event in all the twenty-four hours—a proper outfit, combined with trained skill in the art of hygienically bathing a baby, ought to make it one of the happiest of happenings. Either it should be merry and stimulating—the morning bath; or soothing—at bedtime. The subject of correct bathing for infants is subtle and complex, and includes many varieties of the three main forms—the cleansing, the stimulating, and the quieting bath. Temperatures, health conditions, the correct way to hold the child, and many other points, must be understood, and they form a big topic which is covered in other lectures. But in the study of hygienic nursery furnishings you learn to provide a full equipment for these baths.

Two basins are needed, one for the warm water, the other for the cool bath which follows. A deep, oblong basin, partitioned across the center, is convenient. Knitted washcloths should be used for the body,

cheese-cloth or old linen for the face. Have plenty of Turkish towels for drying the baby's body; soft, damask towels for patting dry the face; enough washcloths to afford one to each basin and fresh ones for every bath; and a soft bath-blanket, or your own bath-apron, to receive the young Neptune when he emerges from the water. The apron may be made of flannel gathered upon a waist-band, on the lines of the ordinary kitchen-apron; or a knitted one may be purchased, fleeced with a soft nap of cotton on the front side. The latter is absorbent and does not shrink.

A word on the subject of sponges.

Don't!

The time-honored sponge is absolutely non-cleansable; it is a honeycomb of passages and cells where germs may skulk. Even the tiny sponge attached to a celluloid handle and designed for cleansing the ears and the nostrils is unclean. The bit of cotton is thrown away after using, but

this tiny sponge may cherish and nourish infection.

As a finishing touch to the toilet outfit, have a bottle of alcohol upon the toilet-table, ready to add a stimulus to the cool morning bath now and then, if your doctor approves. A little alcohol added to the water serves as a mild tonic.

The scales are an important item in the equipment of the complete nursery. The best, which cost about twenty dollars, have a platform and scoop at one end; these are chosen by physicians for their accuracy. But a very fair substitute can be purchased for one-third the price—a pretty little affair of white enamel, with an alluring basket for the baby. And for one dollar the simple scales, with a ring at one end and a hook at the other, can be had. Sling a large diaper, with the crowing victim therein, to the hook, and get an accurate weight.

The weight-chart must accompany the

scales. You can block out your own on a sheet of paper, or buy one which gives an average infant's line, tracing the weight from birth downward through the loss during the first days, then upward as the increase mounts. One such chart gives the line based upon 10,000 observations by that famous pediatrician, Dr. L. Emmet Holt, and has spaces mapped out for records of diet and dentition on the back. This is thoroughly reliable and very convenient. The average line gives you a fair idea of about where your own baby's weight should be, day by day; nevertheless, be warned against considering this line of undue importance. Not how much he weighs, but how much he gains, is the important point; and even this may be misleading, for improper food sometimes causes a fatness and consequent rise in weight that makes trouble in the end.

A record-book should be on hand, for an accurate report of feeding, growth, and ab-

normalities. These details are to assist the physician in case of illness. He has some data to guide him if you can turn to a certain page and show just what formula was followed at a certain time. Under the head "Feeding" should be recorded the intervals, the details of weaning, every artificial food ever used, with dates, particulars of changes, and reasons for changes; also, any symptom relating to feeding, as "gas" or "constipation."

Under "Growth" your book should record the baby's length at birth, the red-letter dates upon which it first held up the imperious head, first grasped for objects, and so on. This is not all sentiment. Your physician may be much helped by such information, which sometimes throws light on questions of muscular weakness and mental trouble.

"Abnormalities" is a dreadful word. But take courage, and approach it. Its bark is worse than its bite. It is merely a

doctor's way of telling you to keep a complete record of illness, with dates, and details of any simple home remedies used.

The instructor of this class may be an idealist, but she is an idealist with a sense of humor. You find this out day by day, as she touches upon the extreme views of some most eminent scientists. "A common sense middle path between neglect and overcare," is her watchword. You observe the twinkle in her astute eye as she describes the nursery housekeeping recommended by some pediatricians. Only a sterilized person should enter the nursery under any circumstances, say the extremists, and such a person should wear a special gown and gloves, to be put on at the door. The tenement baby has a better chance, according to her, than the baby reared on superaseptic theories. Nevertheless, she recommends that the ruler of the nursery be taken forth if he is to be interviewed by strangers, rather than receive them on his throne; without wish-

ing to live in undue awe of the germ, it must at least be heeded. And because of this needful heed, she has a word to say on the subject of infants' toys. They must be washable, they must be washed daily, and they must be tied to crib or carriage so that they can't fall to the floor. For all is fish, so to speak, that comes to the baby's mouth.

Rubber or celluloid dangles and rattles are washable, and are suitable for the baby during the days when he tries the taste of everything that comes his way. Incidentally, bells should be avoided, or any small ornaments lightly attached, for they have an ingenious way of coming off and following the example of Jonah. The squeak has been found to come out of certain squeaking toys, and has made its way down more than one throat. The cutting-ring, in particular, must be kept immaculate; it should be made of hard rubber or ivory (a hard cracker is sold for this purpose, too) and tied so that it can't touch the floor.

The pacifier comes under the same category as the sponge, and can be dismissed in the same way by the one word, "Don't!" If one word to the wise is not sufficient, then here are several words, which should be enough to cause the pacifier to be omitted from your shopping list for the Complete Nursery. In the first place, it is slovenly, for it falls repeatedly to the floor. It is a lazy means of stopping crying, when the real cause should be investigated. It makes the lips sore. It may deform the mouth permanently. And, above all, it is one of the foremost producers of adenoids.

Although the carriage is not intended for nursery use, it is often wheeled about there, on stormy days when the baby cannot be taken out, but must be dressed for the street and given an indoor, open-windowed outing instead, and it may as well be purchased along with the nursery equipment. The decree of science is against the very low go-cart for the young baby; although

convenient to handle it brings the child too close to the dust and its microbes, besides causing it to sit up too long. A simple, high carriage is better until six months have elapsed; the simpler it is, the more cleanly it will be. An adjustable hood should be ready to shade the weak eyes of infancy, and there should be an adjustable seat which can be put in after the baby is old enough to use it. At first, the carriage is merely a bed on wheels.

And now the baby can justly declare his house in order—this house o' dreams which a scientist has been conjuring before you. And when the dream comes true it will be for you, oh, Young Woman of Today!—with all the science of the mother of to-morrow, with all the love of the mother of yesterday—to prove a worthy keeper of that house.

CHAPTER V

FEEDING THE NEW BABY

IT was a bewitching little smilax-garlanded lunch-table, a delicious pink-and-green lunch. Nothing was lacking except the really important guest. "Why *doesn't* Dr. Hedger come?" our hostess plaintively murmured, again and again. As we passed slowly on, from tomato bisque to strawberry-and-mint ice, her eye roved ever toward the door, but Dr. Caroline Hedger did not appear.

Then, in a body, the lunch-party—being a party with a purpose—went over to Dr. Hedger's office, which is in a huge office-building in Chicago. She met us with hands in the air, a horror-stricken expression on her rosy, wholesome face.

"I forgot all about the lunch-party!"

she cried frankly. "I sent the boy out for a sandwich, and worked here all noontime." Then, triumphantly, "I was working out a great improvement in feeding babies!"

As a matter of fact, the party had been arranged so that Dr. Hedger might tell us about her work, but she was so busy doing that work that she forgot to talk about it. Let us pause to digest this incident.

And now, to proceed. This is what Dr. Hedger has done for the great, grim city of Chicago. She, working through that wonderful institution, the Woman's City Club, has organized a School of Mothercraft which, in only a little more than a year's time, enrolled two hundred mothers, who regularly attended its free courses in six centers scattered over the city. In direct charge of all these centers is Mrs. Frederick Cleveland Test, who was a practicing physician herself until she had so many babies of her own that she had to take down her

sign and practice on them. Those two women are making history, not only in Chicago, but in all parts of the country where the profession of motherhood is being recognized.

Lessons are given by the most skilled physicians, nurses, and teachers obtainable; lessons in the things a mother should know, from the days when the first far-away flapping of the stork's wings is heard, through the period of birth and infancy. But the subject upon which the heaviest stress is laid is: Feeding the Baby.

It is the most vital of all matters connected with the care of a child. What those Chicago mothers are learning, every mother in the United States ought to know.

First and foremost, the slogan is: Nurse your baby.

This is so simple a rule, and it has been recited so often, that it may appear superfluous. But the greatest pediatricians say that it is not superfluous. They claim that

it cannot be repeated often enough, so necessary is it that mothers should fully realize its importance. Statistics have shown that ten artificially fed babies die to one naturally fed.

The School of Mothercraft, in enunciating this rule, does not mean that there are to be no exceptions to it. But it does insist that only extreme special cases justify artificial feeding. No matter how subtle and scientific is the present process of modifying cow's milk, it cannot compare with the oldest process of feeding known.

This is what Dr. Hedger says to a mother: "If you are a healthy, normal woman, nature is modifying the food *every day* to meet the child's changing needs."

The subject is worthy of thought. So subtle a chemist, so wise an old mother is this nature of ours, that she is constantly on the lookout for the baby's new demands, and modifying, or remixing its food to meet those demands. No science, no per-

centage formulas, can keep up with her.

There are many incidental advantages in the natural method of feeding. One is the protection it affords against contagious diseases, especially whooping-cough and scarlet fever. Do not take this as an unqualified statement. Your child may contract the diseases, even while he is being nursed, but his chances of resisting them are far better if he is fed by his mother. Other minor reasons for its superiority are multitudinous. But the fundamental reason is that this is the method provided by Nature, and she knows what she is about.

Here is the next simple truth insisted on by this school (the teachers are all big people, and big people are never afraid to be simple): Healthy mothers are those best fitted to nurse their babies. Therefore, the self-evident deduction is: Be healthy!

Now there is plenty to be said about the mother's diet, her bathing, and all the

other items of her bodily care; but there are specialists who dare assert that her mental care is of no less importance. This is a bold statement, and when I pinned one of these specialists down with it, she hesitated; then she made the plunge.

"The nervous environment of the nursing mother is quite as important as her diet, and I'm not sure but the day will come when I shall say it is *more* important."

Another pediatrician says: "A physician can't even advise a mother as to her diet and living conditions in general until he has made a thorough study of her psychic condition, her mental attitude."

Think of all that this means! It is a tradition as old as history that terrible fright or sudden bereavement or any great shock may check or wreck a mother's milk. But there are other causes more far-reaching than these. To insure perfect food for the child, your mental hygiene must be perfect.

The little ugly thoughts that spring like weeds in a mind must be pulled up. Little hates, jealousies, resentments, self-pities, fears, depressions—do you realize that if these thoughts are in your system you are, in a sense, feeding them to your child? That is, they are lowering your own vitality by being left to grow in the garden-plot of your mind, and your child's condition tends to follow yours.

All of this does not mean that, because of the importance of mental health, you are to relax vigilance over your body. Look to every detail. The diet which has always agreed with you is the one for you now—that is, as a general rule. Let your physician tell you what exceptions your case requires. Fewer bogies are held up to terrify the mother than in old days. Regulate your system by a wholesome and varied diet rather than by drugs. Take regular exercise, but do not overdo it, just because you hear its importance emphasized so

often. Exercise and eat just about as you have always done.

Now for the baby. This Chicago school, following among its advising pediatricians Dr. C. G. Grulee, is advocating the long interval between feedings. Based on much experience, both in private practice and in infant-hospital work, Dr. Grulee recommends a four-hour interval. Whether this time be a trifle shortened or not, regularity must be insisted upon. You yourself would be a cross-grained dyspeptic if your dinner were at five-thirty one day, six-thirty the next, and eight the day following. Be as accurate as the clock and as firm as Gibraltar, in keeping His Imperious Majesty to exact hours. He won't like it at first; he will assert himself, and loudly; but your own tact will teach you how to divert him a little until his feeding-time comes.

Advocates of the long interval argue, and with reason, that the little stomach is not emptied in a short time, and that it is in-

jurious to add fresh food to that which is still but partially digested. They advise the hours of two, six, and ten o'clock, A.M. and P.M. There are thus six feedings in twenty-four hours during the first month. After that, one night feeding, given at midnight, is enough. By prescribing these far-apart feedings, advocates of the method have rescued many an ailing baby that was being fed every two hours, and this practical demonstration has built up their belief in the rule.

It is hard to adopt the four-hour method if you have already formed a habit of feeding the child frequently. But remember that often the baby is only thirsty, not hungry, when he cries, and a little boiled water will satisfy him. And if it doesn't—oh, I know how weary nerves weaken, all unstrung as they are. But giving way to them now means worse suffering for mother and child later.

Discipline is an austere-sounding word

to use in connection with a tiny baby, but it is true that discipline ought to begin on the day the baby is born. This means that every regular proceeding should be firmly adhered to, for the sake of both mother and child. You have not the right to indulge little whims, such as the capricious tasting of a meal, then a brief nap, then another tasting. Teach your child to take all that he needs at one feeding, which should not be longer than twenty minutes, at the most; then, to wait until next meal-time. It sounds almost cruelly stern, but you will have a happier baby in the end.

Here is something that a trained nurse told me: "It seems impossible, but half the mothers I meet ignore the proper position in which to hold their babies when feeding them. They do not realize that the hand should be so placed as to give the baby full freedom for breathing. Of so simple, so obvious a matter as this, they say they have never thought!"

She told me something further: "Mothers feed their babies, then they hold them up, perhaps even dance them, toss them—and wonder why the poor little stomach doesn't retain its nourishment! Lay the baby down after each meal, watch it nestle, hear it purr, until it dozes off—and solve the problem!"

At last, when His Majesty reaches the advanced age of nine months or thereabouts, the much-dreaded process of weaning occurs. The natural food no longer meets the requirements of his sturdy body. He needs more iron, for one thing. The best way to make the change is to make it all at once, giving the bottle entirely. If you are in the midst of hot weather you may be obliged to wait a little beyond the nine months, but you should never let a child go past its first year without being weaned. If you have now and then given it water from a bottle, it will take more kindly to the new method. And, if yours

has been a well-governed baby for nine months, he isn't going to make such a dreadful fuss about the change, because the habit of obedience is already formed in him.

When we come to the laws of artificial feeding, they look at first glance like an appalling chapter of "Don'ts!" "Don't use cane-sugar," "Don't boil the milk," "Don't use infant foods of which you know nothing," and so on, until you wonder if they will wind up with, "Don't feed your poor baby at all!" But when you step into the tenement quarter of any city, and see a baby being quieted with a sausage, and then into a half-million-dollar residence, and find an infant in French hand-embroidery being pacified with a soothing-syrup which contains one of the most deadly drugs, you come to the conclusion that, from sausage to soothing-syrup, "Don'ts" are needed everywhere.

Suppose the physician in charge has

ordered an artificial diet. He may do this for any one of several reasons. Insufficient supply of natural food is the commonest of these, although many find that in such a case a mixed diet is better than no natural food at all. Certain forms of ill health in the mother necessitate the weaning of her child. If she should be suffering from an acute infectious disease; if she should be very weak; if she should be the victim of certain very serious chronic diseases, the bottle may be ordered. Now the first requisite of artificial food is that it be the closest possible imitation of natural food; and that is found in modifications of cow's milk.

Choose the milk your baby is to live upon as if the choice were a sacred ceremony. If you can't have a personal introduction to the cows intrusted with the grave responsibility of feeding your offspring, at least know something of the dairy. Be sure that it is clean, that clean

methods in milking are employed, that the milk is yielded by health, grain- or grass-fed cows, that it contains no preservative, that it is as fresh as possible (twenty-four hours is all that really should elapse between the cow and the baby), and that it comes from a herd, not from a single cow, chances of harm from one animal being lessened in a mixed product.

Like all good rules, this last has its exception. If you are able yourself to keep one good cow, whose milk you know agrees with the child, then you will do well to continue the use of that product. Avoid the fancy breeds, as they have a tendency to disease, and their milk is too rich. The milk of a Holstein is best for the baby, being the most nearly similar to the natural; other common-grade cows, such as Devon and Durham, are good.

Cow's milk undiluted cannot be fed to a young child, for the simple reason that it is nature's food for a calf, not a baby. But

mix the right ingredients with it and you have a safe and nourishing food. Don't expect your baby, however, to become the young Sandow he might become on the preferred diet. He won't, other things being equal, gain as fast; but he will get on.

When your physician has advised you as to the best combination for mixing your child's food, obey his prescription to the letter, for what's one baby's meat may be the next baby's poison.

Your physician will recognize the individual needs of your child. Then make ready your little laboratory outfit, for the preparation of this food is a serious affair. So delicately constructed is the mechanism of the tiny body that a slight mistake may be a life-or-death matter. Germs of which you would never be conscious in your own system may be fatal to the baby. Absolute cleanliness—by that I mean cleanliness as a surgeon, not a cook, would use the term—is essential. Even the most scrupulous

housewife seldom realizes the full meaning of this word. Simple washing is not sterilization. You insure safety by making it a rule that no utensil used in this food preparation shall be used for anything else.

You will need a large pan for mixing, one which holds at least two quarts; a pitcher; a double boiler; a large spoon; a funnel; a graduating-glass; a bottle brush; bottles and nipples. Granite-ware, china, porcelain, glass, are the most cleanly materials; they do not rust. Every sharp angle and corner should be avoided in selecting the shapes; these harbor dirt, which means germs. Curves cannot conceal dirt.

The funnel should have a neck small enough to be inserted in the bottle. The bottle should be all curves, and with shoulders as sloping as those of a fashionable figure; this shape permits the brush to scour every portion. Until you shop for bottles you will not realize how many bad ones there are, hard to clean, and full of

dirt-hiding corners. The nipples should be of the best rubber, so that they will not crack. Cracks harbor infection, and there is really more danger from them than from the bottles.

Each morning enough food should be prepared to last twenty-four hours. You will need as many bottles as there are to be feedings, namely, six, for the same rule of the four-hour interval is to be followed in artificial feeding. When you have prepared the whole amount of the twenty-four hours' food, fill the bottles, seal them with plugs of sterilized cotton, and place them on ice, or in a thoroughly cold spot. The nipple is not to be put on until the time of use.

No milk must ever be allowed to sour in the bottles; as soon as they are emptied, cleanse them and stopper them until the next food-preparing time. Then go at them with the brush and soapsuds, rinse them again, and boil them for a quarter of an

Photograph taken under the auspices of the New York Diet Kitchen Association.

Cleansing a bottle with the bottle-brush. The small pan and pure white soap have been used in the first cleansing: the large pan will be used for boiling the bottles.

hour. Dry them on the outside only. When filled, close the necks with sterilized cotton, a barricade which the unseen enemies of the baby cannot pass. The nipples, too, must be cleansed as soon as they have been used; they are more dangerous than the bottles if left with milk in them. Once a day turn them inside out, scrub them with a stiff brush, boil them; when not in use let them lie in a solution of boric acid, one teaspoonful to a pint of water.

Tell your physician exactly what is the source of the milk you use, and let him decide whether you must take the precaution of pasteurizing or sterilizing it. The former process requires that the milk be brought to a temperature of 150 degrees and kept there for thirty minutes; to sterilize, the milk must be brought to boiling-point. The double boiler is used. The pasteurizing can be done after the milk is modified.

If any water is to be used in mixing,

sterilize it. Whatever the diluent used with the milk, it should always be cold before mixing. Barley-water and oatmeal-water may be made up in quantities, to last for three days if kept cold all of that time. The rule for making barley-water is: To one quart of water add one teaspoonful of barley-flour and one-half of a teaspoonful of salt. Boil over a slow fire until the mixture is reduced to half; then add enough water to equal one quart. If you are using one of the infant foods, it can be dissolved in tepid water, perhaps even in cold; and so can the sugar. The latter is never cane-sugar, you remember, but milk or malt-sugar. If malt-extract is used, bring it to a boil. And, by the way, although doctors disagree on the subject of the sugars, this Chicago school preaches malt-sugar. Experience has convinced the instructors that it causes less indigestion than the other and this experience is gleaned from many babies.

When you take out a fresh bottle for feeding, you must warm it to blood heat only; never let it be hot. This is done by placing it in hot water. A simple rule for testing its warmth is to squeeze out a few drops on your wrist; they should feel warm, not hot.

A word to the wise about dyspepsia; many a baby has been cured of colic by its manner of feeding being changed from the short to the long interval method. Overfeeding is at the bottom of most of these cases. Of course, if the matter is serious, you must consult a physician; but observance of simple hygienic rules will accomplish so much! The colic-y baby may need nothing more professional than a fresh-air treatment. Does he sleep with a window open? A well-freshened sleeping-room is at its best when it becomes outdoors. Does he have an alcohol rub following his daily bath?

Another word to the wise: don't lay undue stress upon the matter of weight. It

has blinded many a mother to a child's dangers; it has alarmed many another without cause. All other growth being proportional, the increase of weight is the gauge of a baby's improvement; but so many times other growth is not in its true proportion! Fattening foods may be those most indigestible to the child. Certain oversweetened condensed milks are positively harmful, furnishing far too much sugar to the little stomach; and yet, after its use, the scales report an astounding gain. Overfeeding often produces an excessive weight with direful consequences. Dr. Grulee states that "the attempt to produce weight by more and more food causes more fatalities than bacteria and hot weather combined." And he adds, "The baby who is extremely fat at the end of the first year suffers from attacks of gastro-intestinal disturbance during the second to pay for overtaxing of the digestive functions."

The system of far-apart feedings, which

is now arousing much interest among pediatricians the country over, is said to have originated in Germany, where it has produced excellent results. Cleveland, Ohio, has adopted it to such an extent that, in this city, there are thousands of experiments to judge from; it has been proved an undoubted success. New York has made rather unsuccessful attempts to introduce the method, finding the mothers unwilling to make the effort required to "break in" a baby to this new habit. This seems the only difficulty; where babies have been kept strictly to the rule, they have thrived. Chicago is preaching the doctrine not only through this School of Mothercraft, but in the Infant Welfare Society, whose nurses, in one year, make more than thirty-five thousand visits to the homes where babies live. Not only is the baby benefited by this method, but the mother who nurses her child with difficulty is assisted by a longer rest between feeding-times.

When it comes to artificial feeding, this school is opposed to the elaborate percentage method so much in vogue a while ago; and in other cities, too, we find much reaction against that system. By it, a prescription for each child's food was studied as if it had been a medicine, and formulated with the most appalling nicety. Specialists are simplifying the matter nowadays, and, although the individual baby must be considered, hair-splitting is growing in disfavor.

Watch your baby to see that he gains in weight normally and regularly, not that he weighs superlatively. Seven or eight pounds is an average healthy weight at his entrance into this world. But the newcomer may range from five to twelve and still be normal. He is going to lose up to the fifth day, approximately, and then begin to gain, reaching his original weight when about two weeks old. From that time on, the breast-fed baby should gain

Filling a bottle, which will be stoppered and placed in the ice-box. The milk has been strained into the pitcher.

Photographs taken under the auspices of the New York Diet Kitchen Association.

The complete outfit for preparing artificial food for the baby, and for the caring for the bottles, nipples, etc.

about six or eight ounces a week for the first six months, then two or three ounces a week for the next six months. Thus, at the end of the first year we find him weighing some dozen pounds more than at the beginning. If he has been artificially fed, he may gain even less and still be healthy. If you find a gain above eight ounces a week, the danger-signal is out. These figures are given by a conservative pediatrician; a more generally accepted rule is that the baby trebles his weight in the first year, which puts him rather over than under twenty pounds. But as nearly dead a baby as I ever saw brought back to life was rescued from *overfeeding,* having been born a fourteen-pounder, and stuffed thereafter like a Thanksgiving turkey.

It's worth remembering that in this inestimably precious little human product in our arms, it's quality, not quantity, that counts.

CHAPTER VI

THE GROWING BODY OF YOUR CHILD

A YOUNG man in a certain New Jersey village is selling ribbons, chest-plasters, and ginger-snaps in the post-office. He was to have been an architect in a large city—his talent was unusual—but he can never use his eyes for draughting. The reason is that somebody let him overuse them during a period in his boyhood when they were weakened by serious illness.

A clever, ambitious girl in a New England college had to break off her junior year and go home, a nervous wreck. She had not overstudied; college students rarely do. The average curriculum is not too much for the healthy student. But she had been on

the verge of nervous wreckage ever since babyhood, because her mother had not known how to care for a sensitive young nervous system in the formative period. As a baby she had been constantly dandled, trotted, rocked, clucked at, chirruped at, scolded, shaken, flopped, tucked, untucked, and fussed over; the bill came in twenty-one years later.

A brilliantly promising young surgeon gave up his practice last year and went to Colorado to raise alfalfa. The world needs alfalfa, to be sure, but there are several thousand who can raise it to one who can remove the human appendix with his incredible skill. But he has to live in the dry country. Nobody thought to feed him on fresh air and an especially nourishing diet, to encourage his interest in athletics—in general, to make a business of fortifying him against the threatened attack of tuberculosis.

We will refrain from multiplying this

dismal list of the handicapped. To many of us it is far, far sadder than a list of the dead. But when you stop to think of it, do you wonder that when Dr. Thomas Denison Wood, of Columbia University, lectures to his classes on the hygiene of childhood, he tells them that it is the least understood hygiene in the world?

It is not, he feels, so much that humanity is ignorant of the details of hygiene, although there is vast room for improvement on that score; but that it fails to grasp the significance of those details. Such cases as the above can only be explained by lack of understanding. We don't realize that during the first year especially, and to a great extent during all the years of growth, life habits of health or non-health are formed. Indeed, Dr. Wood claims that moral training, to be effective, should have as a basis a healthy body. That's too big a matter for us at present, but let's not forget the statement.

Now for that body on which we are to build our moral training. Consider the number of children annually born in the United States. Every one of these children has, or had, in the beginning, at any rate, a mother. That makes a multitude of persons annually undertaking the most responsible position that there is. How many of them are fitted for the undertaking? How many of them would dare declare that they fully understand the growing body of their child who is to be?

Dr. Wood preaches a social parenthood—that all grown-ups ought to feel the responsibility of all children. But there's no getting away from the fact that the person most intimately responsible of all is the one who let the boy architect ruin his eyes, who wrought nervous destruction for her daughter, who opened the gates to tuberculosis—the mother.

It's not a pleasant thought. But there's always compensation for facing an ugly

truth courageously. When the generations to come march forward like a procession of young Victories—heads up, chests broad and brave, limbs straight and supple, poised minds housed in poised bodies—the credit will be most of all due to the mothers who understood their business—the professional mothers of tomorrow.

One day I asked Dr. Ira S. Wile, that famous pediatrician who has saved so many babies through his big civic work in New York City, that he would blush if he had to tell you their number—asked him to formulate a very brief creed stating the fundamentals of a child's right living. Here are the articles of the creed.

Plenty of air, which includes sunshine, as sunshine always gets in with the air if it is anywhere around.

Plenty of rest.

Plenty of water. (This means both within and without.)

Moderate and nourishing food.

Moderate clothing—ask yourself if the child is coolly enough dressed rather than warmly enough.

Plenty of play.

Plenty of common-sense.

Which last, being interpreted, means the wisdom and the initiative to adapt all laws to your individual conditions.

Let's look over the articles of the creed, one at a time. Plenty of air is the child's right from the day it arrives. Not only should the nursery air be kept clean by constant ventilation, at first by means of the window board if it be winter; but every little while the room should be flooded with outdoor air. Move the baby into another room while you open every window wide. Do this as soon as he is dressed in the morning, to start the day well; just before you put him to bed, to start the night well; and in between for good measure.

He must have fresh-air baths indoors by way of introduction to the open. Before

he is a month old—we are talking about the winter baby now—he is to be dressed in cap and cloak, placed in the carriage; in short, given to understand that he is to make his first outing—and then entertained with the closest imitation of that outing consistent with the weather. Roll the carriage to a position near the windows, fling every one of them open wide, both top and bottom, close the doors, and give him a good quarter-hour outing indoors, increasing its length daily. When six weeks old he can go out—say for a half-hour at first, longer each succeeding day. Suppose he is a summer baby; take him out at even a week, say the modern-among-moderns, in the very best weather; at any rate, before the first month has elapsed.

In all this common-sense must judge for itself. It recognizes the fact that a strong wind is irritating to the respiratory organs of a baby; that a thermometer below freezing is a warning to the very young baby;

that the latter part of the forenoon, say about eleven o'clock, and the middle of the afternoon are his best times for a ride in cold weather, although all the long summer day, if fair, is his to revel in. He should fare forth in his carriage from the beginning, never in arms. He needs the carriage hood to shield his supersensitive eyes, and his position on the cushion is better than when carried.

Up-to-date physicians approve of out-door sleeping, although the safe-and-sane type are uttering a warning against over-zeal in this matter. The temperature, as well as the robustness of the child, must guide you. A bitter little tragedy of last winter proved that the baby heart is not stout enough to pump in defiance of any temperature.

But it's a safe rule for the growing child that, other things being equal, the more hours of the twenty-four he spends in the open, the better. Eating, sleeping,

working, playing, loafing—he can do every one of these, at least a part of the year, outdoors. Two of the greatest ills that flesh is heir to—tuberculosis and nervous disorder—are treated nowadays with fresh air. Forestall the physician.

Now for rest.

Your new baby sleeps nine-tenths of the time. It ought to. Occasionally it takes a brief vacation from sleeping in order to cry. This, too, is as it should be. At least a half-hour a day ought to be spent in what appears to be lamenting its fate, but is, in reality, mere lung-exercise and a sort of self-assertion; a way of stating, "I'm alive, and I wish it thoroughly understood." But for all its assertions it is too helpless to turn itself in bed, and it must be turned, for its present comfort and for the sake of symmetrical development. Except for this, the more it is left alone the better; after one month, it need be fed but once during the night.

The young baby is extremely excitable, and too much stress cannot be laid on the quiet which is its right. One of the commonest of baby-abuses is putting it to bed in a stimulated condition—playing with it, romping and laughing, at bedtime. Instead of this, it ought, for at least a half-hour, to be gently drawn into a state of relaxation. It can be taken to the silent nursery, undressed slowly, soothed by quiet talking and peaceful lullabies, led toward the total loosening of nervous tension which the night should bring. Care must be taken, however, that it does not grow dependent upon singing, rocking, or any other form of soothing.

The child needs sleep, much sleep, moreover, restful sleep. All sleep is not restful. If the healthy child does not sleep well, find out the reason. Cold feet should be rubbed. The bedclothing may be too heavy, or too tightly tucked in. The room may be stale of air. With a baby, there may

have been carelessness in dressing, or too rapid feeding which has caused slight colic. Its last meal may have been insufficient. An empty stomach may disturb the sleep of the older child, too; some light food, such as crackers and milk, may be needed at bedtime to draw the blood away from the head. Adenoids or enlarged tonsils may be interfering with the breathing, making the child restless. There is a reason, at any rate, and it is your business to keep on hunting until you find it out. Every child, at every age, should have long sweet hours of undisturbed sleep at night, and a nap every day for the first half-dozen years of its life, if not longer, making a total of ten or twelve hours if possible.

Plenty of water—here is where the splashing begins. The normal baby ought to take to water like a duck. And it will, if the bath is properly given.

It is about ten days old when the first tubbing takes place. The room is warm,

and the temperature of the water is 100° Fahrenheit. Later, you will have a chance to don your own bath-apron; just now, the best you can do is to observe, while the nurse holds your offspring, bathing its head and face and drying them first; then gently soaping over the little body and immersing it quickly. And you make a note of the fact that babies are patted dry, not rubbed.

The temperature of the water does not go below 95° for the young baby. Decrease gradually, until you bring it to 85° by the end of the first year. These temperatures are for the first bath; the second is the cool rinsing which follows, to close the pores against cold, and to stimulate. The second should never be cold for a baby, merely refreshingly cool.

For the warm and cool bath there should be two basins, two washcloths, and castile soap. The baby is soaped, bathed in the warm water, then quickly but gently rubbed over with a cloth dipped in the cool

water. The baby is held with the left arm, leaving the right free for the operation.

In all the hygiene of bathing it is well to remember the meaning of the two baths. The warm is for cleansing and relaxing, the cool for stimulating. A restless child may be cured of bad sleeping by a warm bath at bedtime. Make the water tepid, sponge the baby off, using only a little soap, dry the body softly, then rub the limbs and back with a soothing movement. The cool bath is for the morning, and is given without soap, and sometimes with a little alcohol added, for a tonic. One must always remember the very sensitive skin of the young child, and avoid all rubbing with a towel.

The finishing touches of the bath are the powder, either rice or unperfumed talcum, well dusted into all the fat creases but not lavished all over the body, lest the pores be clogged; and a cleansing of the eyes with a solution of boracic acid—one teaspoonful to a pint of water, used tepid. You remember

Baby's bath should be stimulating, if taken in the morning: soothing, if taken at night.

that this is to be squeezed into each eye from a bit of absorbent cotton, the baby held so that the water will run to the outer corner of the eye.

Growing children should have a warm bath at night, and cold in the morning, provided it agrees with them. The cold tubbing or shower is for those who react, glowing after it. If they don't do this, try the cold sponge. Even this is too severe for some; not for many, however. The warm bath is too relaxing for most to indulge in every night. Some, too, are made restless by it, with a feeling of feverishness. For these, two warm baths, even one, may be the maximum per week.

Plenty of water within, is a subject included with diet, and diet is so vast a subject that it is to be omitted here. Next in the creed comes clothing.

The first thing to remember is, that it should nearly always be lighter than it is; the second, that it should be properly dis-

tributed. Heavy underwear and bare legs in cold weather mean a very poor distribution of clothing over the little body of the child who is old enough to run about. Dress the child in underwear at least one grade lighter than the heaviest, even in midwinter, but cover that child all over its body when it is outdoors. Our modern houses are warm, and the child's circulation is brisk, and it should not be bundled indoors; the change can more easily be made by means of the outer garments, putting on a warm coat and leggins. Always remember that knitted garments and loose-woven garments are both warmer and lighter than close-woven, thick ones.

An important warning in regard to the clothing of growing children is uttered by physicians concerning the tight, dragging garters now in vogue. They tug up the stockings at one end, tug down the shoulders at the other, by means of the tight shoulder straps which are attached to the

waists supporting the garters. The little plastic body is pulled out of its free, erect carriage, and a tendency to round shoulders or one-sidedness may be greatly increased. There are good shoulder straps which hold the garters without the intervention of the waist, straps so made as to draw the shoulders back into a correct posture. These are best of all, for the danger of the round garter to circulation is well known.

Plenty of play, says the creed. It is rather a pathetic thought that this generation has to make a science of play for its grown-ups. Thank fortune, the normal child still knows how to play if it is given the chance. See that it has this from the beginning, and the physical exercise of the growing child will pretty well take care of itself.

The new baby cries—yes, fond and apologetic mother, it screams—but that's part of its gymnastics. The lungs are expand-

ing. It wiggles and kicks and flaps its arms as if about to crow, and investigates, with contortions, its fingers and toes. Let it. That's all it needs—loose clothing and covers, bare feet, opportunity. Spread a quilt on the nursery floor, strip the baby down to its diaper, and let it entertain itself like a circus acrobat—this by the time it is a few months old. Before that, your own wide bed may be used instead of the floor. Take it out of its carriage when it is outdoors, and let it kick with enthusiasm over the delightful outer world it is getting acquainted with. A pen, or inclosed playroom, is excellent; a two-foot wall incloses a mattress, and the baby can entertain itself therein. Such a pen may be purchased on wheels.

Play, exercise, should be as spontaneous as possible. Don't make a slave of yourself to amuse the baby. It is better off without you. It is better off without your urging when it starts to walk. This, as

well as the play, should be spontaneous. The baby knows pretty well when it is ready to undertake the great change from elemental four-footedness to the uprightness of civilization. Never offer it a mechanical aid. The common "walker" is pernicious; don't use it. If the baby really shows a desire to walk, but is timid, hold your hand a foot from it and encourage it to walk to you. Always bear in mind the fact that the young bones are soft, in the formative process, and misshapen legs may result from too early walking and standing.

Apropos of soft bones—do you know that lateral curves of the spine are found in perhaps as many as thirty out of every one hundred school children? And by that thirty, specialists mean not those with the slightest deviation from the median line, either, but curvatures serious enough to need treatment. It is safe to say that half the people in the world having what phy-

sicians know as curvature would be shocked to learn it. They warn their dressmakers to allow for a high hip or a sloping shoulder. For women are the majority of the victims. They do not know that the uneven hip or shoulder is likely enough the result of a lateral curvature of the spine.

Scoliosis is the technical name for this one-sidedness. It develops during the years of soft bones. The child perhaps forms a habit of sleeping always on the same side. She forms a habit of standing with one hip raised, often resting an armful of schoolbooks on the left hip and letting it sink. She may wear the incorrect garters mentioned above. She may curl up one-sidedly when she sits for long periods. Habit, habit, habit—always, day after day, the soft bones are forced into a crooked position, and some day she steps forth, a grown woman, the bones hardened and fixed for a lifetime, with this ugly curve established.

It is like the molding of cold metal that has been poured when molten.

Nobody but a watchful mother has much chance of averting this deformity. She must break up every one of these habits of bad posture, insisting that the child shall sit, stand, walk, straight. If the first sign of a curve has developed, let the child learn to sleep lying on the concave side of the trunk. The mattress should be a firm one. If the school does not give sufficient gymnastic exercise, see that she (or he—for boys may develop the trouble) joins a gymnasium. There are special corrective exercises for such deformities. Talk this matter over with a first-class physical educator.

Not only is a curve like this an annoying disfigurement to endure, but very serious results may follow, from the pressure on certain organs.

Flat foot, the falling of the arch, has been called by Dr. Judson, the orthopedic sur-

geon, "an ailment for which there is really no good excuse." Teach your child a correct posture; give him shoes that are large enough, heels that are low enough, leave his ankles free enough—no tight lacing—choose soles that are flexible enough, and he's not likely to be troubled.

When mothers have a clearer understanding of the fundamentals of right living, such as diet, ventilation, baths and the like, we shall have a generation which is resistant in general to the inroads of disease—less susceptible to contagious diseases, to degenerative diseases such as heart and kidney trouble, to epidemics, to nervous breakdown, to tuberculosis. In addition to this, we must have an understanding of special forms of hygiene—of the eye, the ear, the throat, and so on—if we would radically reduce the list of those handicapped by deafness, myopia, and all kindred afflictions.

A member of the Harvard Medical fac-

ulty made the statement that nothing smaller than your elbow should ever be inserted in a baby's ear. That is an excellent first lesson in the care of the ear. The human ear bears a deal of wholesome neglect —that is, inside. Nature provides wax for protective purposes of her own. But the keenest watchfulness should be ready to note any sign of deafness. This same specialist says that the mother is often the last person to recognize this. Over and over she insists that her child is inattentive. But no perfectly normal child is inattentive, he states. The child is keenly alert, provided all his faculties are unhindered. Educators have come to recognize this fact of late years, and it has caused a deal of upsetting in the schools. "Stupid" and "inattentive" children have been found to be suffering from adenoids or myopia, so that they heard only part of the teacher's instructions, or never saw clearly what was on the blackboard.

The great proportion of adult deafness is caused by adenoids. These cases are usually incurable. If the growth had been removed when the deaf person was from four to eight years old, at any rate before twelve, he might be enjoying lectures, concerts, sermons, and musical comedies today.

If the child breathes persistently through his mouth, if he has repeated earaches or abscesses in the throat, heed the warnings. Adenoids are probably present and should be removed. Deafness is a probable result, and a general devitalizing, due to clogging and poisoning of the system. You wouldn't keep your child shut in a closet all the time; you would say the air was bad for him. He is in much the same situation with his breathing passages partially stopped.

The tonsils are the primary source of infection. If there is a constant tendency to tonsilitis, a physician should make an examination. Children should be taught to gargle when very young, and a daily gargle

of a listerine solution, one part to five of water, may correct a tendency to "scratchy" throat. A persistent running at the nose may be merely the result of over- or under-dressing, causing a slight chronic cold; it may even result from a nutritional disorder. Mouth breathing may possibly be merely a habit, easily corrected. But for the most part it is well to see a specialist if there are symptoms of ear, nose, or throat trouble, for they should be nipped in the bud.

The care of a child's eyes begins as soon as the child enters the carefully prepared nursery, with its softened light. When he goes forth to ride in state, it should be beneath a parasol lined with blue or green. Few realize to the full the meaning of perfect cleanliness as regards the eyes; the boracic acid solution should be used every day, even twice a day is not too much, until the child reaches four or five years. Dr. Edward S. Peck says that every mother

ought to know that this rigid cleanliness, the use of a teaspoonful of boracic acid to a pint of sterile water, will prevent in large measure the formation of sties and crusts and bad conditions of the eyelashes. It is possible that this simple preventive measure will avert more serious trouble and the consequent use of glasses later on.

Don't be afraid of the oculist. Thirty-five per cent. of ingrowing eyes in infancy can be corrected by the early use of glasses; this is better than being "squint-eyed," isn't it? Any deviation from the normal should be looked after, and promptly. About fourteen inches from the eyes is the normal distance for holding a book or any close work; if the child holds it much nearer or farther, have his eyes examined. But a vast proportion of eye trouble is due to strain which might have been avoided by a watchful mother. Try preventive measures, and you may be able to defer the use of glasses until age calls for them.

Train your boy and girl in habits of care for this precious gift of sight. Teach them the simple code of honor toward the eyes. They should not read by fading light, while lying down, or with the light shining directly into the eyes. They should sit near a window or lamp, with the light falling over the shoulder. The same rules hold, of course, in writing, sewing—any close work. If the right hand is being used, be sure that the light falls over the left shoulder, lest a shadow fall on the work.

Aid and abet the child's own care of his eyes by furnishing him with a proper light for his studying. It should be steady, and so placed as to fall on the book. Teach him to close his eyes, or to look about the room for a few seconds as often as every quarter-hour. His outdoor play life will be a great help to his eyes, for it changes his focus from near to far.

Above all, never let your child use his eyes when he is weakened by illness. The

results may be serious enough in any case, with the general strength lowered; but after the sicknesses that especially affect the eyes—for instance, measles—such carelessness is criminal.

Help your child to possess sound, regular teeth. Not only will they be an ornament, but they will protect him, in many cases, against digestive ailments. Don't make a bogey of his first teething process; it is far less serious than superstition claims. The child's nervousness at that time may be greatly lessened by an abundance of fresh air and particular attention to general quiet. Help along the new tooth by a gentle rubbing of your finger upon the gum; give him a ring of hard rubber or ivory, or the hard cracker ring; his troubles are well on the way to being over.

But while the first teething process is often taken too seriously, the later care of the teeth is seldom taken seriously enough. Dr. Walter Clayton, who has examined and

treated the teeth of many school children, believes that the fundamental failure made in caring for the teeth is neglect of the primary ones. He considers it important that a child be taken to a dentist by the time it is three years old, even six months sooner, whether or not you know of any trouble. The dentist may detect something that you missed.

It's a common thing for mothers to say, "Oh, those baby teeth will fall out soon anyway—what's the use?"

Here are three answers to that:

The primary teeth, if decaying, may infect the second, or permanent teeth, ruining them for life.

They may, by falling out before their time, deform the soft, easily molded jaw.

They may, by being broken and decayed, cause imperfect mastication, with serious stomach trouble resulting.

From the first, the teeth should be kept scrupulously clean. Wash gently around

the first one; brush them later, with a tiny toothbrush, and before your offspring is old enough for the kindergarten he should learn to handle his own moderately stiff brush, working up and down as well as across. Tooth powder should be used in the morning, and plain water, or a few drops of tooth wash in water, at night. Let your dentist tell you what kinds to buy. Absolute purity is essential.

While the child is still young enough to drink a great deal of milk, there is a tendency to what is known as "green tartar." This is a lactic acid formation, and will increase at a rapid rate without proper cleansing. Every six months a dentist should look over the teeth.

Protruding or crooked teeth can be fairly easily straightened in the beginning, but after the soft jaw hardens, efforts are long and painful, often they fail altogether.

Above all, guard the six-year molars. They are the most valuable asset in the

way of teeth that humanity has, being the four real workers of the entire corps. They are willing to do the most of the grinding through life if they are cared for.

Even a toothbrush is not too small and too humble a thing to play its modest part in building the future of the human race, you see.

CHAPTER VII

A FOOTING FOR LIFE

IT was weeks ago that I saw it, but I can't as yet forget a certain scarlet toy balloon.

It was tethered to the foot of a little white bed in the most luxurious private room of one of a great city's great hospitals. It had just been brought in by a distinguished elderly man, along with a lavish pile of other toys, and it had impertinently bumped the statesmanlike nose while the statesmanlike person tied it to his little grandson's bed.

"Look what grand-dad brought me!" the youngster chirruped from his pillow. "This is the fire engine—and say, look at the hook and ladder! But that's the crackerjack of the bunch!" and he turned to the

red balloon, where it swayed and rocked and rollicked on its leash.

"It's a peach!" he murmured ecstatically, and for moments his eyes rested on it; then——

Oh, no, there was nothing wistful or self-pitying or one whit suggestive of sentimental Sunday School tales; indeed not! He was a little thoroughbred. He just sort of bit back something, the way a man might do, then he turned to the nurse with a briskly efficient air and gave instructions:

"Say, I guess you'd better pass it along to some kid that can run with it outdoors."

Later on I learned the why. A baby foot had seemed weak, and had turned more and more, and the mother, noticing, had thought it a habit which "he would outgrow." The soft little foot had begun to take on a permanent misshapen form, and one day that mother waked up to the fact that she had allowed an orthopedic surgical case to de-

velop while she was looking on. And here lay this little chap, surrounded by all the irony of hospital luxury, a suffering invalid during days when Mikey across the street was luxuriating in early spring mud pies —for the simple reason that nobody had attended in time to giving him a proper footing for life.

Of course this is an extreme case. But minor foot ailments are so common—I might almost say universal—that they interfere with human pleasures and accomplishments all the way from the hop-scotch of a little boy to the march of an army. That is why Dr. Josephine Hemenway Kenyon, in her course on "The Physical Care of Infants and Small Children" at Teachers College, is preaching to her class that you can't begin too soon to care for the feet of a child.

"Large ailments grow from small beginnings," I heard her tell her class. "In hospital practice, I have known children of no

more than four or five years to cry all night from the pain of flat-foot."

Surely that is enough of a text for a very long sermon!

There are two fundamentals in foot-care, and they are—

Correct posture.

Correct dressing.

And since both of these virtues can be achieved (given a normal foot) at home, I propose an organization to be called, Association of the Mothers of Today for the Purpose of Putting the Chiropodists of Tomorrow Out of Business.

When you and I were little, we were nagged and bribed and punished into "turning our toes out." Thus did so-called civilization plant the seed of innumerable cases of flat-foot. This pose was called graceful, and the "pigeon-toed" child was held up as a terrible warning. Today we know that extreme toeing-out is a distortion tending toward deformity, and that the child who

toes in, while not to be imitated, is choosing far the lesser error of the two. "The straight foot posture" is the new ideal of orthopedists; it is preached by them constantly, and it is already being taught in many schools and gymnasiums, Dr. Henry Ling Taylor, professor of orthopedic surgery at the New York Post-Graduate Medical School, being one of the strongest influences in bringing this about.

Experiment. Place your own feet in an exaggerated outward posture, to see the result more plainly. You notice that the weight, instead of being evenly distributed, tends to fall on the inside of the sole; in fact, the foot is inclined to roll over somewhat on the inside. Now look at the inside —the ankle, and adjacent portions. They protrude, distorting the entire shape of the feet.

Next, place the feet so that they face forward. You feel the weight of your body resting evenly, the soles placed squarely to

receive that weight. You see the ankles straightening up, returning to their normal and beautiful line. Isn't just one look sufficient to prove that this is Nature's position for the human foot?

The foot which rests unevenly upon the ground is disturbing perfect balance. The results are various. Undue pressure upon some one spot may follow, causing a corn or the ingrowth of a nail. Or there may result that sadly frequent trouble—and a serious one—flat-foot, which results in acute pain and often impairs the entire health by causing suffering and curtailing exercise. What a start in life for a pair of little feet which must walk and stand, and would like to run and dance, for as many as possible of threescore and ten years!

Begin, then, by placing your child's foot correctly from the time he starts to walk. The first mistake you can make is to put him into a "walker." Besides its general fault of urging the child too soon, it commits

the specific sin of causing the baby, as he propels himself, to acquire a habit of pushing constantly with one foot, turning that member over on the side while pushing, until the position becomes fixed.

The first lessons in walking are nothing more than a little encouragement to the four-footed infant to rise erect to man's estate. It is so nearly impossible for him to balance at all, that it would be hardly courteous in us two-footed creatures to criticise the way he turns his toes. But from the moment when he begins really to walk and run about, you must be on the lookout to nip in the bud any tendency to a wrong position of the feet. If he is normal, the chances are that he will walk straight ahead as he should; but if he develops a tendency to place the foot unevenly, any amount of persistent correction, no matter how wearisome, is a small price to pay for his future comfort and health.

Abnormalities of course call for a spe-

cialist's care—and at once. There is great danger in letting any malformation go until the little bones harden. "Pigeon-toes," for instance, may be caused by an abnormality at the hip such as no amount of correction at home can alter. Let the orthopedist take any such matter in hand promptly, before you run the risk of permanent crippling.

But much that is wrong can be corrected at home. Weak ankles may often be treated by the mother.

First of all, is your child's general condition vigorous? It is very frequently true that nothing but a general toning-up of the system is needed to give the floppy ankle firmness. If you are a Mothercraftsman, you will know how to build up constitutional vigor.

By way of local treatment, give the little ankles a good brisk alcohol rub at bedtime, rubbing up the leg as well.

Do not purchase every kind of brace and

"corset shoe" which salesmen plausibly offer.

Teach your child the simple exercises which play through all the sensitive foot- and leg-muscles, tingling, calling forth their powers. Dr. Kenyon does not approve of skating, either ice or roller, for weak ankles, in spite of the popular idea that it will strengthen them. She considers the effort to balance too much of a strain. But there are exercises recommended by specialists, among them:

Rise on toes! Over and over, increasing the number of times daily.

Roll dumb-bells with the bare feet.

Run! If the weather prevents outdoor running games, let the child "run on place," a familiar gymnastic exercise, indoors.

Dance! Any dancing is good, but gymnastic dancing is especially adapted to the weak foot's needs. Why not study it a bit yourself, and dance with your child, if you

cannot put him under a professional teacher?

Jump rope! In this, as in all the rest, never let fatigue set in.

Although the above are given especially for weak foot- and ankle-muscles, it is true that every growing child would be better off for taking them. The human foot is a much neglected member. Our ancestors who lived the simple life in the woods used their feet a good deal as they used their hands—they were prehensile. While we have improved upon those persons in manners and style of dress, we are inferior in foot development, and it is time we set about catching up with our forefathers in this respect.

Dr. Kenyon says she is used to being laughed at when she preaches that every child should be taught to use its toes as much as possible like fingers, but she lets people laugh and preaches on. The point is, that the more agile and strong every

muscle in the foot becomes, the less likelihood is there of foot ailments. She encourages toe-games, droll little plays in which the youngsters try to see how far apart they can stretch the five pink toes like a fan; how tightly they can curl them, like a rosebud; how far they can turn them back, like spreading petals. They go into gales of laughter over trying to pick up some small article—a piece of paper, or a small rubber ball, for instance—with the toes, not letting the officious fingers help even one tiny bit.

If symptoms of flat-foot are developing, there are exercises especially adapted to checking this. Of course you will at once correct the foot posture and provide proper footwear, but the exercises should be given as well.

This trouble, sometimes known as weak-foot (for the reason that the foot does not always flatten) or fallen-arch, heralds its approach by pain while standing or walk-

ing and immediately after. As it increases, the pain lasts into the night. It is in different parts of the foot, sometimes running up the leg even to the hip. There may be swelling and tenderness. The victim begins to avoid standing and exercise, sometimes imagining that he has rheumatism.

So frequently it is caused by toeing-out, that the corrective exercises are standing and walking "pigeon-toed," rising on the turned-in toes, and the like.

Also for the sake of throwing weight upon the outer edge of the foot, and the related leg muscles, let the child cross his feet before him while he sits erect on the forward part of the chair, the feet resting on the outside of the soles. He is to rise as far as he can, then sit, rise and sit a number of times.

Drs. Bradford and Lovett, orthopedists of Boston, recommend that the leg of a light chair be placed between the first two toes, then the weight be thrown on the ball. Now

bend the knee and turn the leg outward while the entire sole and heel remain flat.

Let the child, standing, cross his feet in just the reverse of the position you were once upon a time taught—that is, with the toes turned in, the weight coming on the foot's outer edge. Then bend, rise, bend, rise, several times, using the knee and keeping the feet in position.

Let him place his feet side by side, touching all along the inner edges. Keeping the soles flat on the floor, he is to bend the knees as far as he can, then spread them apart.

Let him take hold of the rung of a chair with the toes, and pull and push the chair to and fro. Older patients are given weights in the chair, but this is too hard for the young child. Indeed, any of these exercises which prove a strain should be modified or omitted.

While seated, let him turn the foot, toes inward, against the resistance of a heavy table leg or other fixed object.

The volumes "Orthopedic Surgery," by the above-named specialists, and "The Posture of School Children," by Miss Jessie H. Bancroft, who is assistant director of physical training in the public schools of New York, give exercises which may be practiced at home.

Supposing now that you have done everything in your power to place your child's feet correctly from the start, seeing to it that he treads the ground evenly and with the elastic step which comes of vigorous foot- and leg-muscles—don't undo all the good you have done by dressing those little feet incorrectly. In Chapter III we took up the matter of dressing the baby's feet. You recall that the dainty knitted bootees, while they give an agreeable summer-veranda occupation to ladies at the seashore, are usually of as much use to a baby's feet as they would be to a roly-poly kitten's paws. The baby is to go barefooted, unless his feet happen to be uncommonly cold,

while they are covered with long clothes. His first shoe should be an Indian moccasin, or a correct kid shoe, the description of which was given. If you must have a bootee for state occasions, the soft kid one is a good type.

Don't be careless in the matter of stockings. A tight stocking is capable of doing almost as much harm as a tight shoe. See to it that they never compress the toes through narrowness or "stub" them through shortness. The stocking, along with the bootee, should be omitted while long clothes are still worn; but with the short clothes and the first wee shoe come the little stockings—cotton or silk in summer, part-wool in winter.

At the same time that you are avoiding tight stockings, you must also avoid over-loose ones, for they form folds which rub inside the shoe. And incidentally, never let a child of any age go bare-kneed in cold weather!

One of the habits which makes for lateral curvature —persistently sitting on one foot.

Another habit which makes for lateral curvature—persistently lying on *one* side.

The matter of dye in stockings is of importance. Purchase the good makes only in colored stockings, for the tan or black dye rubs off from cheap hosiery. You can easily see that if there were even the slightest injury of the foot, serious results might follow from the dye working in.

Cheap hosiery, moreover, is like other cheap goods—very expensive. It wears badly, and never pays in the long run. Furthermore, it usually lacks that elasticity, that quality of conforming to the foot, which is so essential to a comfortable fit.

A word to the thrifty mother who diligently darns from an overloaded basket of hosiery—please don't! Throw away those very hole-y socks! Far be it from me to encourage spendthrift habits, but the number of corns and calluses and foot-aches which arise from socks made lumpy with countless darns won't rise up and call you blessed. As long as the darns are few and light, be thrifty—but no longer.

We have come to the shoe, that basis of human comfort, so tremendously important from the first runabout days through life. If you will bear in mind the simple creed of "Freedom" for the foot, you can't go far amiss. Few realize what a wonderfully delicate mechanism the foot is; in the grip of a hard, tight shoe, it is crushed as the works of a watch would be crushed in the clutch of a giant hand. The more the child-foot is allowed to expand to its normal shape, the better.

The shoe has two purposes: one, to protect the wearer from cuts and bruises by means of its sole; the other, to protect against the cold. Since the latter is *nil* in summer, the sandal serves every purpose, leaving the upper part of the foot practically free.

When sandals are not worn, choose a flexible upper which laces. Lacing can be adapted to the shape and size of the foot better than buttoning; but always heed the

warning, lace loose! Dr. Adoniram Judson, a veteran orthopedist of New York, has for years preached against tight lacing as one of the prominent causes of flat-foot.

The elk sole is both strong and flexible, and highly recommended by physicians.

Avoid patent leather. It is heating as well as inflexible. I have known a fully-loose patent leather shoe to cause callous spots simply because it was hard as wood. No foot, large or small, can maintain its perfect flexibility in patent leather.

Fond mothers are far too prone to clap on rubbers at every opportunity. As a protection against wet they must be worn, but never for mere warmth. They produce perspiration and clamminess. The arctic overshoe, with fleeced lining, is better.

Hygiene and Fashion wage eternal warfare over Heels. While extremists declare that the Heel must go, it is the consensus of opinion among conservative, rational physicians and orthopedists that a sensibly

placed low heel, broad, and not under the middle of the foot, is harmless.

After the flat infant shoe comes the child's runabout with a spring-heel, which is practically nothing but an increased thickness of the sole. This is replaced in time by the broad, three-quarters-inch heel which is high enough for all the years of life.

The high heel which has a small surface is, first of all, a menace to safety, for it invites a fall. If the fall does not ensue, a wobbly footing is pretty sure to come, an uneven step, with a tendency to "run down" the heel at one edge. Furthermore, the high heel produces a curious effect in the foot itself. Let me tell you about the Achilles tendon.

It is the strong tendon running from the calf of the leg down to the heel, and is of major importance, having much to do with the entire strength and activity of the foot. It was named for that hero who suffered

from a vulnerable heel—you remember how his mother, when dipping him in the Styx, picked him up by the heel and so left that small portion undipped. Look up the precious old story if you have forgotten it. Now this tendon is thrown up into a false position by the high heel until in time it actually shortens. You say that a low heel hurts; of course it does, after this shortening has become fixed. You have impaired an important part of the foot's mechanism—for the time. Go to work to bring it back into vigor. In time, the low heel will cease to hurt.

A word in behalf of the school-girl. As you care for her future, for the future of the race she is to bear, protect her from the high, misplaced French heel. It causes an abnormal tilt of the whole body, bad enough at any age, but seriously harmful in her formative years.

In the near future there will be a wonderful new story to tell about orthopedic

shoes. The American Posture League, a great national organization whose leaders include some of the biggest orthopedists and hygienists and physical educators in the country, is hot on the trail of foot-facts which we have hardly thought of. Dr. Percy W. Roberts has specialized on this work, taking tracings of a thousand feet, and he finds that there are no less than three types—those evenly balanced, those "inswung," or wider from the median line to the inside, and those "outswung," or wider from this line to the outside. Now the result of all his statistics will be to bring about three shapes of shoes on the market, conforming to the three types of foot, instead of one. Heretofore we have believed that one type fitted every normal foot.

But until manufacturers have followed the League's recommendations, we must be content with the best orthopedic model now made. There are several shoes indorsed by

specialists. One which is favored by many of them combines the hygienic features. It has a sole as broad as the foot. This means that there will be no bulging or overhanging of the upper. Its boxing is high, so that there can be no pressure on the top of the toes—this often causes ingrowing nails. Its width is so great that no pressure can be present across the toes—thus are corns and overlapping averted. The inside edge of the sole is a straight line—the common slanting to a point at the toe causes enlargement of the great-toe joint, and a bunion. This straight line also aids in breaking up the out-toeing habit by holding the foot in a position of facing straight ahead. The shape of the toe is broadly rounding, the outline of the foot. The heel is low, and broad as the sole, and has a strip of rubber on its outer edge which aids the outer edge of the foot to take hold of the ground, so to speak, and corrects the prevailing tendency to take hold with the inner edge. But it tends to

conform to the inswung foot; and we know now that this is not the only normal shape.

An exploded theory of yesterday was that the square toe was "sensible." No foot is square, therefore it doesn't fit. The arch supporter fitted at random should be condemned finally. If an arch is worn it should be fitted by an orthopedist just as much as spectacles by an oculist.

The rapidity of the foot's growth between the ages of two and four is rarely realized by a mother, and she must watch lest it outrun the growth of the shoes and stockings. However, a loose shoe irritates the foot; so buy for the present, not the future. Take charts of the child-foot; either by cutting out the pencil-drawn outline from paper, or by lamp-blackening a piece of paper and getting the impression thereon. By such tracings you can compare the shoe and make sure of a fit. Shellac will preserve the black impression for later years.

When you take off the youngster's shoes

at the end of the day, observe the feet closely. If there is any cramping, it will show then. For as much as five minutes the crowded position obtains.

Some of the little foot ailments which many a mother passes by are the sort that grow like weeds. For one thing, neglect of bathing may cause soreness between the toes, soft corns, and general discomfort.

Dr. Kenyon says that in her years of practice at the Babies' Hospital of New York, it was pitiful to see how many of the little patients arriving at that institution were found to be suffering from such petty ails, which may cause much wretchedness. After the little foot is thoroughly bathed —take care that soap-and-water gets in between all the toes, even if they do curl in resistance!—the drying must be absolutely thorough. If there is a tendency to "cracking," which may be in hot weather, dust talcum in; and if this is not sufficient, use either stearate of zinc or zinc oxide oint-

ment on bits of absorbent cotton tucked into the irritated crannies.

Another thing often found at this Babies' Hospital is that the tiny nails have gone untrimmed, and they may curl over the tip of the pink toe, cutting into the flesh. Or they may ingrow at the edges.

Always trim the nails straight across, and keep them reasonably short. If there is an inclination to press in at the sides, you may cut a small V in the center of the straight edge. Nature's aim is to bridge all gaps, and she will draw the nail together in order to mend this little nick, in her tidy old way, and so pull it away from the ingrowing edges.

When the flesh has actually been cut by the nail, an antiseptic such as carbolated vaseline should be applied.

The child's shoes and stockings should be changed at least once during the day for perfectly dry ones. This gives the entire foot a rest. Another point to be remem-

bered is that the shoes should be removed while the child is having its nap, that the feet may be free. The warm foot bath and alcohol rub at night relieve feet that are achy.

Cold feet should be treated by improving the general circulation, by foot exercises, and by rubbing—only in emergency by the hot-water bottle.

Hard, deformed nails mean pressure, as do calluses and hard corns. The one simple, obvious remedy is, remove the pressure! If signs of a corn are showing, rub the spot with vaseline as often as convenient. Remove one already formed with vaseline and hot foot baths, never with a knife. There are innumerable remedies for this common ailment of foolish mankind, but a serious, inflamed corn should be treated by a physician, and any kind of one should be treated by removing the cause; so it is the opinion of many orthopedists that there is no place for the chiropodist. Surely he

should be avoided if he has not a physician's knowledge of antiseptics and other technical details. A bit of oil-silk or adhesive tape worn upon the spot tends to soften and relieve it while you are making the slower cure of hygienic shoes.

If a bunion has formed, it is a physician's case. But prevention lies in the straight inside edge of the shoe. The pointed toe is pretty likely to be at the bottom of a bunion.

Collodion, or liquid court-plaster, is excellent for chilblains. Apply once or twice a week. But these, too, should be prevented rather than cured. Don't let the feet become excessively cold.

"Hammer toe," and overlapping of the toes, should be treated by lacing a strip of adhesive tape under and over, until the rebellious toes are held in their proper position.

Those little pink feet in your hands are destined for some of the most joyous uses

of life. They have a right to the pliant, springing motions of dancing—to leap and climb—to glorious games, such as tennis and snowshoeing—to lusty hours on the mountain trail. It's for you to give them a fair chance.

CHAPTER VIII

THE GROWING MIND OF YOUR GROWING CHILD

THE most pathetic mother I ever saw was not a husband-beaten victim of the tenements, clasping her babe as the melodramatist pictures her, and begging for its food and shelter through icy streets. She was neither starving nor homeless nor abused; in fact, she had an excellent husband, who owned a prosperous drug store and lavished upon her what he made out of fall colds and spring run-down conditions; she lived in a delightful little surburban home, with a red-cedar closet and a dining-room bell that she had to find with her toe; and she never was hungry, for the cook was a genius at fried chicken and waffles, and, having always

worked in the family, would rather perish than leave.

And yet that woman, fed and housed and loved, the mother of three beautiful children, was hopelessly pathetic. For she confessed that she "didn't know how to be friends with them."

It is a fact that she was shy with her own children! She knew how to look after their bodily wants fairly well (although not with the authority that training would have given her): she saw to it, and conscientiously, that they were fed a wholesome diet, that their cuts and bumps were bound up, that they went to bed promptly, and were clothed properly; but she fell back, silent and awkward, when she tried to talk and play with them—when they sought her mental companionship.

Thanks to Nature, there are few women who have the same confession to make. The average mother takes to the mental life of childhood with instinctive ease. And yet,

after all, there are few who know how to develop that companionship to the utmost; how to take a child's mind as a skilled gardener would take a fine, fertile garden plot and set only the choicest plants to growing there, watering and training and weeding with consummate skill. The most loving, the most willing mothers in the world may do a deal of hit-or-miss gardening in the little minds. The skilled kindergartner often accomplishes more in her three hours than the untrained mother does in the other nine; think of what a skilled mother might do with three times as good a chance as the teacher!

Now this work, this mental gardening, is a part of every complete mothercraft course, just as much as is the bodily care of the child. A most excellent example of it is to be found in Boston. The Garland School of Homemaking, directed by Mrs. Margaret J. Stannard, daily attacks not only the problems of ventilation, sanitation, and die-

tetics, but it offers full courses in story-telling, occupations, directed play—the things that every kindergartner knows. But it does not aim at teaching teachers. It is preparing mothers-to-be for their work. If the pathetic mother had had an education like this, it is a safe wager that she would never have been at a loss to "amuse" her own offspring.

That word "amuse" is a bit vague. To the young child, work and play merge into one. Incidentally, thereby hangs a moral by which we may all profit. Because they are one, an extensive course in this school is covered by the term, "Children's Occupations."

One branch of the work is devoted to home-made toys. Drop in some afternoon upon the group of girl students and you may find paper camels, giraffes, and elephants disporting themselves over the table like Noah's menagerie turned loose. Or busy fingers may be building and furnish-

ing a pasteboard house. Chains of seeds may be in the weaving—anything in the way of plaything that the child may be led to make for himself. Such instructions, covered in an hour or so a week, can be only suggestive; the student's ingenuity will lead her to work out her individual problem along similar lines when she one day becomes the playmate of her own child. Conditions will both restrict and develop. If she marries and goes to live on a Kansas dry-farm, for instance, she will not be likely to propose necklaces made of rose hips, for she won't have many roses to yield hips; but the suggestive training she is getting today may lead her to think for herself of the tiny hanging vase which her small daughter may make from the empty shell of a bullbat's egg found on the prairie.

Now look at the main principles upon which all this handiwork is based.

First, everything made must have a purpose.

Let's digest that thoroughly. It is a rule founded upon the very essence of child study as developed by our greatest psychologists. So important is it, that all the constructive work given nowadays in our schools is based upon it; if the boy makes a simple pasteboard box, he is no longer asked to make it for mere busy-work, to be thrown away when done. He is led to make a box to keep his pencils in, or his dominoes; in short, he builds with a purpose. If the girl is given hand-weaving, she makes more than a futile square; this is to be a rug for the doll's house dining-room floor. Do you wonder they take a livelier interest? They are human, like you, and it's a human law that the end lends zest to the means.

The second rule laid down in this course is that the playthings of the young child shall be constructed from materials at hand.

Suppose your small daughter wants to curtain the windows of her pasteboard

house. Won't you buy her some fancy paper? she implores. To be sure, you might, but it is better to suggest that she look about for something in the house. What sort of curtain would be attractive? Lace occurs to her luxurious imagination. Let's see—there is an empty candy box. . . . So you lead on, little by little, until the paper doll's windows are curtained upstairs and down with the lace of discarded candy boxes.

Now the vital point is not that this is easier and cheaper for you than buying new materials. But consider the value of such a lesson to the child! Economy, ingenuity, imagination, resourcefulness are called into play. She has made a stride toward her useful womanhood of the years to be. She has already had her first lesson in economic homemaking. Not for a moment is she allowed to think that the lace of the old candy boxes is given her because it is "good enough" for this play housekeeping; but

because the utilization of it is better household management. Unless it can be put in good condition it is by no means good enough for a self-respecting doll's dwelling. But her own small iron can be heated and the crumples smoothed out. That torn edge can be mended with the transparent adhesive tape which you keep for mending book pages and the like. A delicate bit of work, that, and excellent training in deftness and nicety.

Psychologists nowadays are directing the child's natural impulses instead of thwarting them. It's no use trying to turn a pear tree into a plum tree, but you can help it to bear the finest possible pears. It is often said that children are destructive; that they like to tear things, for instance. Many of them do. For that reason, it is most interesting to watch the results of encouraging their tearing. That's not as rash as it sounds. When Johnny picks up your embossed stationery and begins to

strip it into ribbons, there is more than one way of dealing with Johnny. Waiving present consideration of the slipper, let us try this:

"Let's tear out a brown bear. I'll show you how. And here's some brown paper." Adding a suggestion to the effect that it's a pity to destroy good things that cost money; and a very firm suggestion at that. But the primary emphasis is laid upon the constructive thought—what to do, rather than what not to do. Then you can give a first lesson in the art of tearing, which has vast possibilities. You won't have further trouble about the stationery. Bits of waste paper will be saved for the tearing of men, women, animals, houses, boats, wagons, automobiles.

Some other day you can suggest simple paper folding. By the time a child is three-and-a-half he can undertake it. Soon he may be given a pair of blunt scissors, such as are used in the kindergarten. They are

made with handles especially adapted to little fingers, preventing cramping and giving the child easy control over the movements of the blades. Little by little he may be led to make various articles for his play, basing them on the "sixteen squares"—a phrase which refers to the process of taking a large square of paper, folding it double, then again, and so on until its creases mark off sixteen perfect squares. By cutting along the line of certain creases the paper can be clipped and bent into a great variety of objects, especially chairs, tables, bureaus, and so on. What is known as "slit work" introduces slits between the creases, adding greatly to the possibilities of riveting the furniture firmly. Miss Sophie Butler, the professional kindergartner, who directs this branch, believes that slit work is the most stimulating among all the cutting and folding methods, leading to more original creation than any other. And this, remember, is what you are always aiming at: not to

compel the child to copy you—the copy is merely to start him—but to encourage him to think out devices of his own. One clumsy invention is worth a dozen flawless copies.

The detailed technic of these arts is explained in various manuals, which can be procured at a kindergarten supply house. This school advocates the use of paper as material until the child is seven or eight years old, for the reason that he can handle it without assistance, whereas the woodwork is only partly his. Muscular control and strength have not, it is claimed, reached a point before this where carpenter tools can be managed without a good deal of assistance from older hands, and the child's independent action is the end sought. Doctors disagree on this matter. The ability shown by your individual child is probably your safest guide.

Discarded articles will suggest uses to you, and the child will be affected by your

creativeness. A box of corrugated pasteboard, the kind used for mailing, will make the paper doll's house which may be furnished with woven paper mats, sixteen-square furniture, and so on. Urge the child to treasure bits that may be made of use. Give him a drawer or box all his own for this purpose. He will soon delight in hoarding scraps of colored paper, empty boxes, tin foil, bright buttons. Chain-stringing affords uses for many materials; if you are summering at the seashore, suggest that bright shells be gathered for stringing; if you are surrounded by a garden, seeds may be used. Develop the child's sense of color and of form. There is no reason for stringing indiscriminately when a wonderful harmony can be produced by combining inch-length pieces of straw with flat, pale-gold shells of precisely the same shade. The dark-red rose hips may be strung with small pine cones, two to one, the cones threaded from side to side. Sev-

eral shades of brown seeds may be assorted and used like beads.

The paper animals, with their many curves of body, legs, and tail, call for a greater control over scissors than do the straight lines of the folded squares, but the child will revel in filling his menagerie as soon as his fingers grow subtle enough. Never urge him beyond his powers. Kindergartners lay great stress upon suiting the occupation to the child's stage of development. The hand bungles and execution is vague in early years; let the faculties find their own way to the light as a sprouting plant must do.

Sewing is an occupation to be indulged in with much moderation. The most advanced kindergartners use it far less than did the early Froebel disciples. The fine pricking on cardboard has proved too severe an eye-strain at an age when every function of the growing body must be rigidly guarded. Coarse needles and large

stitches should be adhered to through the earliest years.

Probably your youngster attends a kindergarten. If you live where this is possible, he ought to. If for no other reason, the kindergarten is worth while for the community spirit it develops. Every child needs to get used as early as possible to his fellow man—fellow man is a trying problem if left too late. If he attends such a school, you would do better not to use kindergarten materials in the home; the very advantage of the home is that it can bring out ingenuity in the use of informal materials.

But suppose, for some reason, your child can't go to a kindergarten. Then it is a good plan to provide yourself with certain professional supplies and offer them for a little while each day, putting them aside at a certain hour just as in school, that spontaneous occupations may take their place.

Miss Grace Brown, of Teachers College,

suggests the following as especially suited to home use. They may be purchased at a kindergarten supply house.

To begin with, blocks are vital. The child instinctively builds. One of the most complete sets made comprises one hundred large blocks, cubes, square and triangular prisms, cylinders and parallelopipeds. They are packed in a wooden chest which will endure almost any hardship. Remember that durability is an important consideration in buying playthings; it is economy in the end, to say nothing of cultivating in the child a liking for that which is substantial and a wholesome scorn for the flimsy.

The wooden beads, which come in six colors and three shapes—spheres, cubes, and cylinders—are good. Choose large beads with large holes, if the child is young—again the eyes must be considered. The coarsely perforated cards may develop the use of the needle—but use them sparingly. The peg boards with large pegs are an end-

less amusement and may be made a basis for simple number lessons. Now that the Montessori smoke is clearing away and we are beginning to see what is left on the battlefield, we find the cylindrical insets and stairs especially useful. The little hand-loom is a delight to the child who is somewhat older—say, six or more. The young child is too inaccurate to use the loom much, although he may undertake the single-strand weave. But the whole beauty of weaving lies in accuracy, and until he is old enough to handle his materials with exactness he merely bungles. This is true of raphia and reed work also; they are valuable, but not until the time is ripe.

Let's talk over toys. A while ago the Kindergarten Department of Teachers College presented an exhibition of toys that was a revelation to many an excellent parent. Experts had canvassed the toys offered by large and small manufacturers, designers, and dealers, and had selected

those best suited to the child's mental growth. The result set mothers to thinking.

The most notable feature of that exhibit was the total elimination of what are known as mechanical toys. The dog that wags his tail when he is wound up, the canary that flutters, the bandmaster who waves his baton, all were missing. These have one vital fault; they require no effort on the part of the child.

Don't mistake the meaning of this. Scientists don't want to deprive the little people of play, to turn life into a prosy schoolroom. But the normal child likes to make an effort. Buy him a monkey that bows and takes off its hat at the same time that you buy him a set of tools; you will find the monkey lying despised and forgotten while the tools are still freshly busy at planing and sawing.

This is what these child-psychologists announced as the purpose of the toys: "To

Blocks foster the building-instinct and develop the constructive faculty. They should be of substantial, durable material. This set is made of hard wood and comes in a strong chest.

make possible the reliving, under make-believe conditions, the domestic, social, and industrial life of society." You'll find that the thing which makes for the child's broadest development makes him happiest. A laundry set with which your daughter can really wash her doll's clothes with real water, a kitchen set with which she can almost cook real food, delight her domestic instinct, and incidental lessons will occur—explain to her the reason for basting her meat, for not boiling the tea itself, and you will find her far more keenly interested than in mere fictions. If a safe device for heat in the toy cook-stove ever develops, we shall have a toy of immeasurable value.

The carpenter's and the gardener's outfits will appeal to the industrial interest of the boy. Engines, automobiles, and aëroplanes, although they demonstrate mechanical laws, at the same time deprive him so of activity that they might better give way to tools which he can use for himself.

The social life of society is imitated in all sorts of play homemaking and the relations which develop therefrom. The nursery screen which folds into a playhouse affords vast scope for the imagination.

Every boy and girl should be provided with enough outdoor toys to make the open a delight. Velocipedes, doll carriages, sleds, and so on should be of the best, for they are exposed to hard wear.

Having discussed what to do, there is something to be said on what not to do. Don't let your child have many toys. "Few and good," is the slogan. Do you know a sadder figure than the blasé young victim of the overloaded Christmas tree? Sets of toys which may be bought one-at-a-time develop the collecting instinct and keep alive the appetite. The circus may be gathered, animal by animal and clown by clown; the farmer set in the same way—farmer, wife, cow, barn—to completeness. All of these jointed beasts and humans, by the way, af-

ford the child opportunity to place them in countless positions, to "make them do things," or dramatize with them.

You have noticed that every little girl clings to the old and battered doll far more closely than to the new and magnificent. Back of this fact are some of the finest instincts of the human race: mother love, loyalty, tenderness, pity. You would not have it otherwise. You are thankful to let those instincts grow in the sunshine of your encouragement. So provide your daughter with a doll to which she can cling, for all the woman awake in her, all the promptings of the countless foremothers who created her, are urging her to cling. There is a reason far above dollars and cents for choosing a durable doll. Wood, which will neither break nor shed sawdust, forms an excellent body. The jointing gives activity, and the washable quality is important. The modern human-faced dolls, designed from living child models, are a delight.

One day I dropped into Mrs. Stannard's own class at the Garland School. "As I walked through the Public Garden this morning," she was saying, "I saw a great many apparent children around. But only their bodies were there—not the whole child."

Those children, she went on to say, were partially, sometimes wholly, unconscious of the teeming spring life around them. They played in the open; but they hardly noticed that flowers bloomed, they could not have named them, they had no idea that the Garden is a wonderful migrating station for birds, that if one listens and looks sharply he may catch the squeaky-gate sound of one, the orange flash of another.

Why?

Because no one had called these children's attention to the miracles around. They moved as with ears covered, eyes bandaged.

This class of potential mothers was stop-

ping to think. She went on talking about the out-of-door life. "Its opportunities for the child are absolutely unlimited, or, rather, are limited only by the parents," was something she told her class. They won't forget that. Not only is knowledge developed by informal lessons—the way the birds live, flowers grow, bees labor—but the imagination is developed by such mysteries as those of the winds and waters. And this too she said: "The first feeling of the great creative and nurturing spirit comes to the child through the out-of-door world; it is essential for spiritual growth."

That day she led her students to recall their own childhood. Sit down alone for half an hour and try the experiment. See if it doesn't open closed doors, reveal things forgotten. It will put you in touch with your own child.

"Oh, I remember that I used to make castles in the sand, and tunnels, and I made a natural aquarium in a pool where the

water stayed," somebody said. "I'd forgotten!"

"We used to serve meals with asparagus berries for peas and the centers of daisies for pats of butter!" somebody else exclaimed.

Step by step, through memory, they entered the realm of childhood. It is a thing that every mother should do. It will lead her to sympathize and to suggest. If you will remember that your child's instincts are the same as those of the grown-up, you will the better grasp his impulses. Only the outer expression differs from your own. The shelter instinct is there, for one, shadowy but insistent. Don't you recall making a house under the drooping branches of a tree and carpeting it with old shawls? Don't call him foolish for doing the same. Provide him with shawls. If his invention is slow, suggest furniture made of boxes and stumps. But beware of suggesting and furnishing too much. Mrs.

Stannard says that children are in danger of losing their "Yankee ingenuity" through too much help.

The food instinct prompts make-believe meals. Here is an opportunity for lessons on the safe and unsafe berries. Point out the savory wintergreen for "salad." Encourage the foraging instinct; if Tommy is bursting with enthusiasm because he has found a "good highbush blueberry place," show your interest. He may some day make the sort of business man who scents a sound investment.

The clothing instinct plays a strong part in child life. Talk over the way you used to make a gown of broad grape leaves, pinning them together with stems. Never lose a chance for a nature lesson. If you are trimming the dress with shining cottonwood leaves, call attention to the peculiar twisted stem which makes the leaves tremble and flutter so much more than those of most other trees.

In short, use the natural world around you for the development of the child's mind. This is one of the most important phases of kindergartening, and you have far more opportunities than the teacher. Lead the child into it, talk with him about it, share it with him.

He should have his own garden and tools by the time he is three or four. He will enjoy the dramatic preparation for planting, but the daily care of the garden is drudgery; help him to a patient persistence by leading him to think of the goal. It may be only a wee mess of beans, but it is the purpose which sustains.

The small space may be a garden plot of not only radishes and lettuce, but of almost all the virtues. It offers a stern lesson in patience; we mustn't pull up the radish to see how it's growing. It bestows responsibility; and think over Mrs. Stannard's suggestion at just this point. Two ways are equally wrong, she says: to relieve the child

of all responsibility, doing his gardening for him; on the other hand, to give him responsibility without the training needed to meet it.

Then don't send him alone to the garden first. Go with him, and show him how to weed, water, cultivate. But let him understand that he is responsible; that the plants will wilt if he neglects them, just as he would wilt if his father and mother forgot to give him food.

Apropos of that impulse to pull up a plant; it is prompted by a wholesome curiosity, after all. Satisfy its cravings, then. Plant peas or beans in a soaked sponge or bit of cotton so that the child can watch the sprouting.

Animals and fowls are a wonderfully educative factor in his life—not only the wild things which he is being taught to observe, but pets which, like his plants, call for vigilant care. And their example is not to be scorned by the haughty human.

Could any lesson in patience excel that of the sterling hen, with her three weeks of biding, and never an iritable word because of it? Who ever saw her stamp her foot or throw a hairbrush?

The sense of responsibility is awakened by certain household duties. They should be very light, but everything depends on their being attended to regularly and thoroughly. If the child's task is to fill the glasses for breakfast, then they are to be filled, not left half done because Dick Jones calls him through the window to see a new Japanese kite. The Montessori method teaches simple phases of housework to very young children, proving that they can just as well learn to fill glasses without spilling the water as to do futile "busy-work."

If you would be an all-round companion for your child you must develop your own best faculties in every line. Learn to be a good story-teller; the girls in this school practice telling stories to each other. It

may be The House that Jack Built, or Peter Rabbit, or Snow White; whatever serves to develop the art of imitating the animal noises, to show facially the wonder of a fairy tale, to control and change the voice.

Don't attempt to tell a story until you know it—either word for word, or so that you can give it readily in your own language. Nothing wrecks the dramatic effect so completely as to break down at the thrilling climax with "Let me see—what comes next?"

Visualize the tale to yourself. Make it so real to your imagination that you can't help making it real to others. The more the Dwarf and the Giant and Cinderella live to you, the more they will live to your hearers.

Choose your stories with regard to the children's tastes. They have a right to their individualities. The boys will probably want adventure, mystery, action; so will the

girls, but they will show a stronger leaning toward the imaginative and the poetic. The public libraries in some of our cities are doing splendid work in story-telling, and some of them furnish lists of stories suitable for different ages.

Just a word on the subject of the arts. Never fail to encourage any sign of talent. Real talent grows in spite of snubbing, to be sure, but how much faster without it! Every child ought to have crayons, clay, and modeling tools. You can buy these where you buy your other kindergarten materials, and if there is any talent it will show itself.

And don't neglect music in the home. Even if you are not a musician, you can surely lead in a little simple singing. There should be gathering at the piano, and there should be occasional rocking with the lullabies. The Garland School insists upon the latter, despite those who would banish it altogether. Although you must

not be a slave to your baby by rocking it to sleep regularly, there is too great a value in the development of rhythm to let the mother's rocking chair go. "Child Land in Song and Rhythm" is one of the song volumes recommended.

If you will look over some of the books of games furnished by kindergarten dealers, you will be able to introduce new and delightful singing games and others, even folk dancing, into the home life, outdoor and in. There is a volume on finger plays for the very young child; from that time on through all the growing years you should be able to make yourself an entertainer in your own home. Of course, this can be overdone. The child should never lose his own resourcefulness. But the rainy days and the sick days, as well as occasional other days, need all the help you can give.

It pays. The happiest woman I know says she has won her happiness through

talking with her child, playing, dancing, singing with her child, learning and loving nature with her child—through being, indeed, a child with her child. She says it pays.

BIBLIOGRAPHY

PRELIMINARY

Woman and Womanhood.....Caleb W. Saleeby
Heredity of Richard Roe.....David Starr Jordan
Reports of the American Association for Study and Prevention of Infant Mortality

CARE OF THE MOTHER

Prenatal Care.....Mrs. Max West, Children's Bureau, Washington
Four Epochs of Woman's Life.....Anna M. Galbraith
The Prospective Mother.....J. Morris Slemons
Woman and Marriage.....Margaret Stephens

CARE OF THE BABY

Care and Feeding of Children.....L. E. Holt
Care of the Baby.....J. P. C. Griffith
Infant Feeding.....C. G. Grulee
Infant Care.....Mrs. Max West, Children's Bureau, Washington
Talks with Young Mothers.....Charles G. Kerley

THE GROWING CHILD

Froebel's Motherplay.....Commentaries by Susan Blow
Teachers College Record.....January, 1914
Growth and Deformity.....Adoniram Judson
Orthopedic Surgery.....Bradford and Lovett
Adenoids in School Children.....Percy R. Wood, Medical Record, 1911, vol. 80
The Posture of School Children.....Jessie H. Bancroft
(Also Care and Feeding of Children. See Above.)

LIBRARY OF CONGRESS
0 022 216 392 4